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ABSTRACT

This book provides an indepth description and analysis of financial management and budgetary procedures for education in Mongolia. Chapter titles describe the content of the book: (1) "General Information"; (2) "Description of the Education System"; (3) "Macroeconomic Review"; (4) "Educational Financing and Budgeting in Mongolia"; (5) "General Principles of Budget Adoption"; (6) "Time-Frame for Budget Preparation"; (7) "Principles of Budgetary Educational Planning"; (8) "Planning Norms for Estimating the Education Budget"; (9) "Educational Credits"; (10) "Other Educational Expenditures"; (11) "Expenditure on Education for One Child of a Civil Servant"; (12) "Process of Budget Implementation"; (13) "Education Budget for 2000"; and (14) "Behavior of Actors," which discusses the role of the ministers of education and finance. Appended are 20 tables and 2 charts that illustrate a wide variety of topics, including enrollment figures, variable costs per student in various educational settings, and general curriculum of Mongolian schools. (WFA)

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Financial management of education systems

Educational financing and budgeting in Mongolia

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Financial management of education systems

Educational financing and budgeting in Mongolia

Buluut Nanzaddorj

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SUMMARY

Mongolia, with a former centrally planned economy similar to the Central Asian republics of the then USSR, used to closely co-ordinate its policies with the former Soviet Union. However, since 1991, following the dissolution of the former Soviet Union, the policies of the Central Asian countries and Mongolia in the area of educational budgeting, previously highly centralized and uniform, have become increasingly diversified, although they still have many similarities. Education is a major category of government spending in all countries of the region; however, its share in GDP and total government expenditure fluctuates and remains unstable.

The contrasting pace of reforms in the countries of the region was caused by their different post-independence policy orientations and development strategies. However, the trial-and-error nature of the changes brought much material for comparative analysis of educational policies and practices in the area of educational finance and budgeting.

The period from 1991 until now provided decision-makers with some breathing space to evaluate the advantages and disadvantages of the ex-Soviet model and to elaborate their own country-specific model of education development. Short-term solutions and crisis management were appropriate policy responses to the problems arising in the funding of education during the first years of independence, which were characterized by economic recession and high inflation rates.

By 2000, some 10 years after independence, the time limit seemed to expire in all countries of the region, i.e. the limitations of the previous model could no longer serve as an excuse for the current

deficiency of the national education systems. In all countries long-term considerations are gaining importance in decision-making on educational policies, while economic prospects are improving.

Educational finance in the region have started to take on a demand-oriented rather than a supply-oriented aspect. Educational expenditure has also started to become better linked with the real, and constantly growing, costs of the provision of education. Still – due to the large teaching force and continuing subsidies – education occupies a major category of total government expenditure in all countries of the region, in many cases accounting for more than 20 per cent, and the fundamentals of budget preparation and implementation have remained unchanged.

If educational expenditure in the countries of the region was reflecting the policy priorities of the governments, availability of funds for this expenditure (income side of the budget) was related to macroeconomic performance of the countries, the pace of market reforms and liberalization of legislation. All countries of the region had to revise their fiscal and budget legislation in 1995-1996.

The six countries of the region can be broadly divided into two tiers. Those countries that had started radical economic experiments and reforms in the early nineties (Kazakhstan, Kyrgyzstan, Mongolia) had reached, by 2000, the stage at which it was necessary to review and adjust their educational strategies in a mid-term perspective. Their policies in educational finance were aimed at drastic cost-reduction and financial diversification to achieve fast results, despite their negative implications for quality of education, internal efficiency and teaching and learning conditions within an overall climate of economic liberalization, privatization and donor assistance. Kyrgyzstan and Mongolia were the first countries in the region to start replacing – as a basis for budget preparation – the outdated

costing norms by global ceilings within medium-term financial frameworks and to experiment with the techniques of programme budgeting under the guidance of the IMF.

Those countries which wished to follow a more gradual and consistent economic transformation and, consequently, to avoid elimination of subsidies and related damage to provision of education (Uzbekistan and Turkmenistan), after several years of *status quo* and deliberations, also realized the need to update their previous strategies of education development and finance. Their previous educational reforms of 1991-1996 concerned mostly curriculum development. Their polices in educational finance and budgeting stressed self-reliance, the predominant role of public education and the need to maintain the existing level of teaching and learning conditions, gradually adapting educational supply to the changing demand and economic context. The case of Tajikistan differs from the other countries because, due to the emergency political situation in the country, many reforms and changes were postponed or delayed.

In the case of Mongolia, the compact size of the country and its population, together with the subsistence type of economy and lifestyles, have made it possible to experiment with many pioneering changes in cost-reduction and cost-efficiency of education, related to market reforms. Educational budgeting has the following features:

- Expenditure for education is declared by law a 'protected' item of the government budget, which should receive not less than 20 per cent of total government expenditure (at present it is at the range of 15-17 per cent).

- Educational legislation was amended in 1998 to reduce the cycle of compulsory education to 8 grades (4 years of primary and 4 years of lower secondary education).

- Teaching staff at primary and secondary education is being retrenched while pupil/teacher ratio, class size and workload of teachers should increase.

- Cost-recovery (student loans) and cost-sharing (tuition fees) are practised in higher and secondary special (colleges) institutions. In 1997, the maximum allowed ceilings for tuition fees controlled by government were discontinued, and the rapid increase in fees caused student demonstrations.

- In 1997, tuition fees (introduced only recently) were abolished in vocational and technical institutions due to low demand.

- Educational vouchers are planned for primary and secondary levels with the aim of encouraging competition between the schools.

- Outgoings for heating, electricity and school meals continue to be important items of expenditure, in particular for regional/local budgets (up to 30 per cent of recurrent budget).

- Mongolia was the first former centrally planned economy in the region to start large-scale education development projects with foreign donors and to take a loan from the ADB for this purpose.

Amongst the Asian centrally planned economies, Mongolia was one of the first to start the market reforms and structural adjustment. Due to its compact population and subsistence economy, the resistance to austerity measures was softer than in other countries, and adjustment-related problems (under-funding of education) and changes in educational management, finance and budgeting (such as private education, tuition fees and student loans in higher education) were less painful. However, the cost and implications of certain changes were underestimated, and they were later reversed (change

of the alphabet from Cyrillic to ancient Mongolian, change of the school cycle, introduction and then elimination of tuition fees in vocational and technical training etc.).

Although education is declared a 'protected' category of expenditure and should not be less than 20 per cent of total government expenditure according to the law, in reality this indicator fluctuates between 15 and 17 per cent. The wage bill accounts for about 40 per cent of educational expenditure, i.e. 28 per cent in the budget of the central Ministry and for regional/local authorities 43 per cent. Outgoings for heating, electricity and school meals continue to be important items of expenditure, in particular for regional/local budgets, accounting for up to 30 per cent of recurrent expenditure.

In 2000, there were 633,938 students enrolled in formal education institutions: 650 pre-school institutions, 668 general primary and secondary schools, 118 universities, colleges and other higher education institutions, and 39 professional and technical institutions. Over a half of general primary and secondary schools operate in two shifts.

The central Ministry is in charge of 29 per cent of educational funding which is designed for higher, colleges ('secondary special') and vocational and technical levels of education, as well as provision of textbooks and non-formal education. As regards kindergartens and general primary and secondary schools, they are financed from the regional/local budget, where the share of primary and secondary schools is 68 per cent, and kindergartens – 24 per cent.

The major policy change regarding educational finance is retrenchment of teachers through the increase of the pupil/teacher ratio by adding two-three more pupils, class size and teachers' workload. At present, the average pupil/teacher ratio at primary level

is 1.18. The workload of teachers is: 18.7 hours per week at primary, 12 hours at lower secondary and 11.2 hours at upper secondary. The dismissed teachers will be eligible for compensation of up to three years' salary. The government allocates US$6.5 million for this programme. Better school-mapping and merging of some schools, as well as savings on heating and economies of scale in supplies are also planned.

Because of the strict fiscal policy to control and cut public expenditure for education at all levels, 50 per cent of primary and secondary schools in the country have deficits in their budgets. As priority is given to the wage bill and heating, capital expenditure is 'frozen' as a rule.

For higher and special secondary (colleges) institutions, student loans are made available to enable students to pay tuition fees. In 1997, government ceilings for the maximum possible level of tuition fees were discontinued, together with government funding of the wage bill. The educational institutions acquired the right to decide the level of tuition fees, but the hike in the cost of tuition fees caused major student demonstrations.

In vocational and technical institutions, which are funded by the government, tuition fees were abolished in 1997 due to low demand for such studies.

The average monthly teacher salary is US$50 at primary and secondary levels, and US$80 in higher education.

It is planned for primary and secondary levels of education to remain free, but educational vouchers may be introduced to encourage competition between schools for pupils. Schools are already allowed to develop income-generating activities, but this

affects the amount of subsidies that they receive from regional/local authorities.

There is some experimentation with regard to budgetary procedures, for example, to plan educational expenditure for the biennium.

Mongolia was the first former centrally planned economy in the region to start education development projects with foreign donors. Their application was in fact tested and revised in Mongolia to be later practised in a more complex Central Asian context. The Master Plan for Education in Mongolia was first prepared in 1994 by the ADB, but it later experienced many revisions and adjustments.

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RUSSIA
ULAANBAATAR
MONGOLIA
CHINA
Gobi Desert
CHINA

INTRODUCTION

The following report was prepared within the International Institute for Educational Planning's (IIEP) research project on capacity building in budgetary processes for education in Central Asia and Mongolia.

This national report on the analysis of procedures in financial management and budgeting was prepared by Mr Buluut Nanzaddorj, Senior Economist, Budget Expenditure Division, Budget Policy Department, Ministry of Finance, Mongolia. At earlier stages of the project Mr Sambuu Altangerel, then Director-General, Ministry of Science, Technology, Education and Culture of Mongolia, also contributed. The competence and expertise of the Mongolian research team were essential in the preparation of this monograph to ensure its quality and coherence.

At the IIEP, Serge Peano and Igor Kitaev, Programme Specialists, guided the project and co-ordinated its organization and implementation. They were directly responsible for the preparation and publishing of this report.

All the participants of the project wish to express their thanks to the sponsor, the Dutch Ministry of Foreign Affairs, The Hague, who provided the core funding for the project.

The context and rationale of the project, its description and methodology, are presented in Appendix I. The main problems of educational financing and budgeting experienced by all participating countries were discussed at the third (analytical) meeting within the project (Cholpon-Ata, Kyrgyzstan, June 1999), and are presented in Appendix II – Programme of work.

Statistical data are presented in Tables 1-20.

I. GENERAL INFORMATION

Mongolia has ancient traditions of military, religious and civil education. In the past century, with the beginning of a new stage of the democratic renaissance of the country, the basis of the modern education system was founded. The first stage of modern educational development lasted from 1921 to 1940, the second stage from 1940 to 1990, and the third started in 1990.

In spite of the fact that the first two stages of educational development were characterized by so-called 'socialist' content, significant success was achieved in the eradication of mass illiteracy, in the foundation of a new system of compulsory education, in the development of secular schools and in the training of pedagogical staff. However, the educational policy at these stages was not directed at developing the personality of students and meeting their spiritual demands. The teaching of humanities was biased to the extent that it caused certain unresolved contradictions and conflicts in curricula.

At present, Mongolia is in the process of transition from a centrally-planned to a market economy. This transition has produced a number of trade-offs, side effects and other unforeseen difficulties in education development and its funding. But in spite of this, the population of Mongolia has wide access to education. A high percentage of the population remains literate and educated.

The democratic reforms which started in the 1990s required significant changes in the cultural and educational development of the country. It is particularly important to create favourable conditions for the comprehensive development of the population, its motivating force, skills and abilities and for ensuring the education

that guarantees advanced development of the society and of the country as a whole.

The state educational policy is based on the statement that the future of the country and its social progress directly depend on the educational level of its population, making education the priority social sector. A number of laws have been prepared and approved by the State *Khural* (Parliament) which legalize the right of the population to education and to active participation in the activities of educational institutions. These laws also guarantee renovation of educational facilities and equipment, etc.

Of the total population of Mongolia, 58 per cent are children and young people aged from 3-29 years. They have opportunities to study at different levels of the education system. The education system of Mongolia includes pre-school, general primary and secondary and higher education. It is worth noting that some graduates of professional institutions start their professional life at the age of 18. The enrolment at colleges, higher-education institutions, universities and Master degree courses is relatively low. In 1999, educational institutions of all levels enrolled 598,000 students, or 41.2 per cent of the total number of children and young people aged from 3-29 years. The children of cattle-breeders, who have a nomadic lifestyle, are not fully covered with pre-school education. Only 31.1 per cent of cattle-breeders' children aged three-seven years attend pre-schools.

II. DESCRIPTION OF THE EDUCATION SYSTEM

In 2000, there were 650 pre-schools accommodating 78,630 children, and 668 general primary and secondary schools enrolling 470,038 pupils. There were also 118 higher-education institutions, universities and colleges enrolling 70,425 students, and 39 vocational training schools enrolling 11,245 students.

Pre-school education

The objective of pre-school education is the physical, spiritual and intellectual development of children. It should provide young children with basic knowledge of the natural and human environment and teach them to respect their elders. It is organized either at home (children up to two years old) or at pre-school educational institutions (children aged two-seven years). Kindergartens are the main pre-school institutions where children acquire pre-school education and pass through primary social relations.

Pre-school-age children make up 22 per cent of the total population. Of these, 30 per cent attend kindergartens. In 1998, there were 660 kindergartens, 24 of which were private, accommodating 70,100 children. By 2000, the number of institutions had declined to 650, while enrolment had increased to 78,630 children.

In 1995, the National Programme on pre-school education was approved by the government. Its main objective was to provide 80 per cent of pre-school-age children with a network of kindergartens. As a rule, kindergartens are situated in the centre of *aymaks* (towns/large cities), *somons* (districts), the capital city and other human settlements. In the process of budgetary planning, one of the most

important issues is estimating the 50 per cent expenditure for school meals (lunch), which should be funded from parents' payments.

Although the Ministry of Finance has charged heads of kindergarten to provide children of cattle-breeders with pre-school education and has allocated budgetary funds for this purpose, this problem is not yet resolved. However, the process of developing the network of home kindergartens through individual initiatives is under way.

General primary and secondary schools

The Constitution of Mongolia guarantees the access of each citizen to free general primary and secondary education. According to the Law on Education, compulsory general primary and secondary schooling consist of a basic eight years of education. In the 1997-1998 academic year, there were 630 general primary and secondary schools enrolling 447,100 children. By 2000, the number of schools had increased to 668, and enrolment to 470,038 pupils. A total of 18,100 teachers (64.2 per cent of the working population) was employed in general primary and secondary education. The enrolment in primary general education was 56.3 per cent; at the lower level of secondary general education 30.9 per cent; and at the upper level of secondary general education 12.8 per cent. The pupil/teacher ratio was 32 in primary general education and 12 in secondary general education. The class size was 30.3. In addition, there were 24 private schools.

Professional-industrial educational centres

Secondary education comprises special and technical education. In 2000, there were 39 professional-industrial educational centres of different types, levels of technical degrees and qualifications enrolling

11,245 students. They received training in a professional occupation and over 100 occupations are covered. More than 600 teachers and specialists are employed in professional education.

In order to meet the constantly changing educational needs of the Mongolian population, a new system of professional education is to be created. Annually, 20,000 young people, or more than 30 per cent of graduates from general schools (after eight or ten years of schooling), are not admitted to higher-education institutions and are not provided with employment. According to the official statistical data received from a longitudinal survey on unemployment and poverty, 59 per cent of the total amount of registered unemployed (63,700 persons) do not have any profession. Of the total population, 25.2 per cent are below the poverty line.

The state policy, which is aimed at sustainable development of the society, provision of employment in all regions and improvements in the labour market and human resources, should place its main emphasis on the activities of professional-industrial educational centres and on improvement of the efficiency and quality of their education. The state should provide the constitutional rights of the population to work, have a free choice of profession and favourable working conditions. The state should also create opportunities for improving the social environment so that the population could apply its skills and qualifications through various employment opportunities, including self-employment and indigenous income-generating activities, as well as work in the informal sector.

Those who have completed eight years of basic schooling have a constitutional right to receive free education and training at professional-industrial educational centres. On the contrary, graduates of general primary and secondary schools (after 10 years of schooling) have to pay for their studies. The norms of variable costs

per student in professional-industrial educational centres are expected to be determined in 2000 in detail. Since professional-industrial educational centres train professional workers, the issue of privatization of these centres, and their financing by different enterprises, is in the process of examination. Their equipment and facilities are improving in accordance with the National Programme on development of technical and professional education and training, approved by the government.

Universities and other higher-education institutions and colleges

In 2000, there were 118 universities, colleges and other higher-education institutions providing citizens of Mongolia with higher education according to approved educational standards and norms. A total of 1,641 students attend courses leading to Master and Doctor degrees, 31,200 students attend the Bachelor programme and 4,011 students are involved in undergraduate studies. The majority of higher-education institutions are private.

Higher education comprises Bachelor, Master and Doctor programmes and courses which are measured by credit-hours. Recently, higher education has been significantly reformed, a number of innovations have been introduced in the education system. Particular emphasis is placed on such issues as social demand for education, management of education, strategic planning, educational standard, credit-hours, certification, accreditation, board of trustees, and returns to education (cost-benefit analysis).

III. MACROECONOMIC REVIEW

With the globalization of the world economy, the financial interaction between different regions and countries is growing. During the past 25 years, prices of mineral resources and commodities usually exported by Mongolia have plummeted. Consequently, the decline in the world market prices of copper, gold and kashmir, which represent 50-80 per cent of total Mongolian exports, has provoked a decrease in state revenue of 30 billion tugriks that, in turn, has caused under-financing of the social sector and negatively influenced the economic situation of the country in general, particularly with regard to the banking sector and financial markets. This example shows the degree of dependence of Mongolia on outer markets. During the past three years the government has conducted a new taxation scheme and fiscal policies which have been aimed at achieving macroeconomic stabilization in the country. These measures have helped to ensure some positive trends in recent economic development.

In order to increase the living standards of the Mongolian population and to ensure really sustainable economic growth, drastic measures have been introduced with regard to foreign trade liberalization, in liberalization of prices, decrease of taxes, improvement of taxation, acceleration of privatization, in reforming financial markets and the banking sector, in development of infrastructure and in improvement of social security. These measures were taken in order to provide universal access to education and to improve health care and living standards as a whole.

Having chosen the path of democracy, freedom and justice, Mongolia is actively introducing political, social and economic reforms. In spite of the difficulties of the transitional period there

are signs of some positive achievements in human development and lifestyle. This can be evaluated from different angles, but the bottom line is that the country is definitely integrated into the world community and continuously follows its rules and regulations. The fact that Mongolia has become a part of the world community can be interpreted as a recognition of its efforts to set up a humane, democratic and civilized society, where each citizen enjoys all human rights in conformity with norms established by the international order.

As the main condition of social progress is the raising of a creative, highly skilled and educated citizen, restructuration of the education sector is considered the essential part of political, social and economic reforms. It is important to make adjustments in the Law on Education which should permit the creation of a democratic legal basis for the education system. Among these adjustments should be decentralization of management of educational institutions, evaluation of educational quality by students themselves, restructuration of types of schools, and development of indicators for accountability and performance.

The state should support joint management of educational institutions by pedagogical staff and students themselves that, in turn, should increase the effectiveness of the education system. One of the main conditions in the support of the education system by the state is the increase in investments. The steady growth in investments started in 1992 and is continuing at present through more rational allocations and earmarked funding of specific target programmes. For example, there is a reallocation of government funds from higher to primary education. At the same time, universities are allowed to experiment with self-financing, income generation and financial diversification, thus alleviating the financial burden of the state.

IV. EDUCATIONAL FINANCING AND BUDGETING IN MONGOLIA

The term 'budget' is defined as a statement of income and expenditure for a given fiscal year with the purpose to identify financial sources necessary for implementation of the state programmes and functions. The education budget has a tendency to grow and is becoming more stable after the adoption of an amendment to the current Law on Education, according to which not less than 20 per cent of the state income must be spent on education. For example, the volumes of budgetary expenditure for education in 1995 and 1996 were 25.3 and 33.6 billion tugriks respectively. This is more than 20 per cent of the annual state income. In other words, each fifth tugrik of state revenue is spent on education. The share of education in GDP slightly increased from about 5.7 per cent in 1997 to about 6.2 per cent in 1998.

Although the volume of budgetary expenditure on education is increasing, it is still not sufficient to meet the demands and requirements of all educational institutions. This necessitates increasing the efficiency of the state budget spending.

Educational institutions are financed also from private sources. There are 71 private higher-education institutions and colleges and 24 general primary and secondary schools. Private financing of education is developing in two directions. Firstly, new private educational institutions have been created. Most of the existing private institutions have been newly opened within the past seven years. Secondly, some of the state educational institutions have been privatized. For example, in the 1997 academic year, the privatization programme started in the Institute of Finance and Economy. The

purpose of this project was to convert this higher-education institution into a private non-profit-making entity.

The state budget allocated for education consists of the central and local budgets. State universities, other higher-education institutions, colleges, professional-industrial centres, specialized schools, national training courses for teachers, national and international competitions, and publication of textbooks for general primary and secondary schools are financed from the central budget. The State Foundation of Education, which grants loans to orphans, handicapped children and children from low-income families is also funded from the central budget. Central budgetary funds go towards:

- Master and Doctor programmes for Mongolian students at the prestigious foreign educational institutions;
- transportation of students from remote *aymaks* (large cities);
- scholarships to handicapped children, orphans, students who study according to bilateral governmental agreements;
- scholarships to Mongolians involved in international projects;
- capital repairs of educational institutions, capital investments and purchase of equipment and furniture.

Local budgets are divided into *aymak* (large city) and *somon* (district) budgets. Kindergartens, general primary and secondary schools, training and educational centres, local professional institutions and informal institutions, such as the Palace of children, the Palace of young technicians, the Children's Centre, the Station of young naturalists, and the 'Nature' Centre are financed from local budgets. The share of central budget in the overall budget for education is about 30 per cent. It is managed by the Ministry of Education.

External financial and economic aid of international organizations and preferential ('soft') loans of international banks and financial organizations play an important role in the education sector of Mongolia. In 1997 a Programme of education development was launched with the assistance of the Asian Development Bank. It consists of two parts: the 'Project on education sector development' and the 'Policy programme of development in the education sector'.

The 'Project on education sector development' is aimed at supporting the Mongolian Government in its policy of market reforms in education in a mid-term perspective. This project is the first significant earmarked investment in education. It consists of three major parts which are subdivided into many programme elements and activities. The first part – 'Improvement in the management and efficiency of education' – includes the following steps:

- improvement of management of all educational institutions;
- creation of a unified informational system of management in the education sector;
- improvement of the system of control and evaluation of education.

The second part – 'Support of higher education' – consists of:

- quality enhancement of education in such fields as economics, business, management, social sciences;
- improvement of teachers' qualification in these fields;
- assistance in the supply of textbooks, creating libraries and informational centres, connecting higher-education institutions to the Internet;
- creating a unified database for all higher-education institutions;
- preparation of Master programmes in business-related fields and assistance in the organization of the educational process;
- preparation of Master programmes in pedagogy and upgrading laboratories of the State Pedagogical University.

Finally, the third part of the project 'Assistance to general primary and secondary education' consists of:

- improvement of supply of textbooks to schools, search for financial resources for the publication of textbooks;
- enhancing quality of upper-secondary education in natural and social sciences;
- renovation and upgrading of school laboratories;
- improvement of teachers' qualifications;
- preparation of the National Programme on development of professional and technical education.

The cost of the project is US$9 million.

The other part of the National Programme of education development is 'Programme policy of development in sector of education'. The main objective of this part is to provide assistance in quality and efficiency enhancement of education by means of optimization of structure and standards of personnel organization. This programme was prepared for a period of four years from 1997 to 2000. In the process of programme implementation, a certain number of personnel was expected to be dismissed. These workers will receive compensation equal to three times their annual salary. A total of some US$6.5 million are planned to be spent for this purpose.

One of the programme objectives is to raise the number of students per teacher. In many countries the student/teacher ratio is considered to be an important indicator of efficiency in education. In Mongolia, the average ratio in 1996/1997 was 21. However, it varies significantly across regions, sometimes reflecting insufficient optimization of school structure and low level of efficiency in education. Within the programme, it is expected to increase the number of students per teacher by five or six. This necessitates a

decrease in the number of teaching hours. A new teaching plan for general primary and secondary schools has already been prepared. Also, new norms of class size, based on the population density and school location, will be introduced. One of the supposed ways to increase average class size is by merging smaller schools and creating pre-primary, primary and secondary schools within such an integrated structure.

Certain measures aimed at decreasing spending on inputs, other than teachers, are also in the process of preparation. For example, it is planned to decrease heating costs, and to create specialized inter-school organizations responsible for the supply of learning materials to schools. It is worth noting that all saved resources will be retained by the education sector.

After the 'Policy programme of development in the education sector' started in 1997, one could see the following positive changes:

- average class size increased by 0.8;
- average number of students per teacher increased by 3.4;
- share of teachers in the total amount of staff in the education sector increased by 0.9 per cent;
- type and structure of 43 general primary and secondary schools were modified.

V. GENERAL PRINCIPLES OF BUDGET ADOPTION

According to the Law on the Budget, educational institutions are warrant holders (cost centres). They are responsible for the following activities:

- budget expenditure: educational institutions are allowed to transfer funds from one budget line to another (it is prohibited to transfer funds from other budget lines to the wage bill);
- effective and rational spending of budgetary funds;
- use of extra-budgetary resources (not resulting from price fluctuations, alterations in budget norms and tariffs, nor from activities planned but which have failed to be implemented);
- preparation of the draft budget;
- preparation of the budget implementation report according to the time deadlines.

These activities are regulated by the decisions of the government and of the Ministry of Finance. These responsibilities cover all fiscal activities related to the state budget. They are regulated by the instructions and norms adopted by the central government and the Ministry of Finance.

Educational institutions which are financed from the central budget submit their budgetary proposals to the Ministry of Education. The Ministry of Education reviews these proposals, sums them up and presents the final version to the Ministry of Finance.

Higher-education institutions Professional and technical educational institutions (vocational schools),	→	Ministry of Education	→	Ministry of Finance

'Special secondary'
educational institutions
(technical colleges)

Pre-primary and general primary and secondary schools which are financed from the local budgets submit their budget estimates to *somon* (district) financial bodies. These submit the reviewed documents to *aymak* (large city) financial bodies which, in turn, present them to the Ministry of Finance.

Pre-school institutions, general primary, secondary schools	→	*Somon* (district) financial authorities	→	*Aymak* (large city or town) financial authorities	→	Ministry of Finance

The Ministry of Finance reviews all the budgetary proposals, assembles them into the draft consolidated state budget and presents it to the government. Then, the reviewed draft budget is presented to permanent committees of Parliament. It is discussed at the hearings of these committees and then four times at the session of Parliament. Only after that does Parliament adopt the state budget.

VI. TIME-FRAME FOR BUDGET PREPARATION

The basic regulations of budget preparation are stipulated by the Law on the Budget and general instructions on expenditure and income estimates of public administrations and organizations. These are approved by the Minister of Finance and the Head of Department of National Development in charge of macroeconomic planning.

In June of each calendar year the Ministry of Finance prepares the budget limits and sends them to the public organizations. These limits are based on:

- norms of the education budget;
- macroeconomic indicators which reflect the State Programme;
- preliminary results of social and economic development;
- budget implementation for the previous fiscal year;
- preliminary results on the income side of the budget.

The budgetary process starts in a 'bottom-up' manner from educational institutions. The budgetary proposals of educational institutions are prepared by their heads (rectors) and executive officers of their financial departments. The draft budgets are sent to local financial organizations by 10 July of the calendar year. Organizations under the authority of the central budget service send their draft budgets to the Ministry of Finance by 10 July of the calendar year. These are reviewed and adjusted by local financial organizations and the Ministry of Finance up to 20 September of the calendar year.

At the *somon* (district) level, mayors and representatives of financial services participate in consultations on budget proposals; at the *aymak* (large city) level, heads of educational centres and representatives of social and financial departments of the city

administration. At the *aymak* (large city) level, a representative of the social department is responsible for these consultations. Controversial issues are solved at the level of the city administration. Then, the draft budget is discussed in the Ministry of Finance in the presence of the head of the local authority in charge of coordination of state policy implementation in the fields of science, education and culture of the Ministry of Education. At this level, disagreements might occur on the following issues:

- number of students per teacher;
- ratio of teaching staff to non-teaching staff;
- class size;
- number of scholarships.

Such controversial issues are discussed between the representatives of the Ministries of Education and Finance. In cases where problems cannot be solved at this level, they are discussed at upper administrative levels of heads of department, state secretaries, and even ministers. However, most of the bones of contention are solved at the level of heads of department.

The reviewed draft budget is then submitted to government and later, by 1 October, to Parliament. The permanent committees of Parliament have the legislative right to make adjustments to the draft budget. By 1 December of the calendar year, Parliament adopts:

- the income side of the central budget (by budget lines);
- the expenditure side of the central budget, including expenditure for salaries, capital expenditure (construction of new buildings and other sides funded from the state budget), administrative and military expenditure;
- the volume of subsidies from the central budget to the government special foundation and the volume of funds to the central organizations - warrant holders;

- the volume of subsidies to the *aymak* budgets and to the budget of the capital city.

Parliament has the right to adopt the budget even with a wider than indicated range of budget lines.

It is worth noting that local budgets are approved after the central budget (first - *aymak* budgets and then - *somon*). Before the beginning of the budget year, and after discussing the draft budget presented by the head of the local administration, the *aymak* and capital city Parliaments (*Khurals* of representatives) approve the income side of *aymak* and capital city budgets by budget lines, the expenditure side of the budgets including wage bill, capital expenditure (construction of new buildings, other expenditure), administrative expenditure, subsidies to *somon* (district) budgets.

The disadvantages of this procedure for budget preparation are:

- expenditure cuts are often practised for such categories as library funds, renovation, research, etc.;
- each educational institution wishes to increase the volume of subsidies;
- responsibilities of teachers and school heads (directors) are limited by the distribution of budget expenditure and providing educational services according to approved workload;
- financing does not directly influence learning outcome;
- schools are not interested in increasing school attendance;
- students and their families are not informed about the volume of expenditure allocated to general primary and secondary schools;
- students are not allowed to choose a school.

In order to overcome these disadvantages a new method of financing for general primary and secondary schools is expected to be introduced. According to this method, students of general primary

and secondary schools will be provided with 'voucher'. The most important issue of the method is to correctly determine the volume of expenditure per student. According to preliminary estimates, it is about 50,000 tugriks.

For the time being, the quality of general primary and secondary education is unequal, mainly because of the lack of competition between schools and, as a consequence, the lack of motivation to increase the efficiency of education. As a result of introducing the new method of financing, one could expect positive changes in the quality of education. Students will be allowed to choose a school and that, in turn, should stimulate competition between schools and raise the quality of instruction.

VII. PRINCIPLES OF BUDGETARY EDUCATIONAL PLANNING

The preparation of the financial plan and draft budget is based on the Law on the Budget, other laws and government decisions on implementation of social and economic policies, budgetary norms, prices and tariffs, agreements on loans and international aid, as well as on main principles of planning:

- Unity. According to this principle, all the lines of income and expenditure of the given organization should be included in one budget. In other words, no planned item of income or expenditure should be beyond the official budget classification.
- Anticipatory planning. The budget should be prepared and adopted before the deadline approved by law.
- Estimation by budget lines. During budget preparation, revenues should be estimated by sources of income, and then distributed by categories of expenditure.
- Balance. Each budget should be balanced by outgoings and financial resources. Non-fulfilment of this principle can provoke the non-implementation of planned activities.
- Economy. Achievement of concrete results and better efficiency by means of low spending.

All public administrations and organizations are guided by these principles.

VIII. PLANNING NORMS FOR ESTIMATING THE EDUCATION BUDGET

Planning of the education budget is based on several regional indicators which are at the starting point for budget preparation. Among them are:

- number of educational institutions (in *aymaks, somons* and the capital city);
- number of students (at primary, lower-secondary and upper-secondary levels);
- class (group) size;
- number of teachers;
- number of cattle-breeders' children who live in boarding schools;
- number of professional education students;
- number of children receiving credits of the State Foundation of Education;
- number of newly published textbooks;
- number of teachers attending the training/retraining courses.

These quantitative indicators are calculated by the Information and Statistical Department of the Ministry of Education and by the Economic Department of the Ministry of Finance. In Mongolia, there are unit and aggregated norms for budgetary planning. The unit norm of expenditure is an amount spent for a certain category of expenditure within the given budgetary year. The aggregated norms are those which comprise all categories of expenditure related to the unit cost of expenditure in a given public administration or organization. In a more detailed analysis, these norms are divided into fixed and variable costs.

Evaluation of budgetary estimates for pre-schools, general primary and secondary schools

In order to prepare the draft budget, pre-schools and general primary and secondary schools have to make the following estimates:

- calculate expenditure for the previous period and study possibilities of cost savings in the coming period;
- determine objectives of the coming period;
- prepare a list of school supplies/materials for the coming period;
- make expenditure estimates for capital and current repairs of school facilities;
- make agreements with organizations responsible for heating, electricity and water supply of school facilities in the coming period.

Then, additional indicators, such as average number of students, classes, teaching hours, teachers and non-teaching staff, are to be calculated on the basis of norms and basic indicators. These are, in turn, approved by the local authorities, based on planning indicators presented by the Ministry of Education. These planning indicators are:

- total number of students;
- number of students entering Grade 1 and Grade 9;
- average class size;
- average number of students per teacher;
- ratio of teaching staff to non-teaching staff.

At the next stage of individual budget preparation, estimates of expenditure for basic services, as well as estimates of revenues from supporting auxiliary services, are made in accordance with the general instruction on expenditure and income estimates of public organizations.

The expenditure side of the budget comprises recurrent and capital expenditure. Recurrent expenditure includes the wage bill, social welfare and payments for material services such as electricity, heating, water supply, transportation, stationery and overheads, travel expenses, textbooks and school materials, home economics, research, uniforms, medicines, renting classroom space, current repairs, organization of sport competitions, transfers, fees and others. Capital expenditure is spent on capital repairs and purchase of basic equipment. Capital expenditure and spending on material services are calculated on the basis of results of the previous period and needs of the coming period.

With regard to income estimates, basic teaching services at pre-schools, general primary and secondary schools are free. The only exceptions are 24 private pre-schools and 24 private schools, which are financed mainly from student fees. However, public schools can provide supporting, auxiliary paying services beyond the standard curriculum. Additional revenues are also derived from leasing school facilities, private farming and providing the population with meals during festivities and social events. These funds, after subtracting expenditure for salaries, become extra-budgetary sources. However, expenditures for maintenance of boarding schools for orphans are fully financed from the state budget.

After making estimates of the expenditure and income sides of the budget, pre-schools and general primary and secondary schools calculate the volume of state subsidies which will make up the difference between expenditure and income.

Aymak and capital city draft budgets of education are reviewed by the Ministry of Finance on the basis of the following indicators:

- student/teacher ratios;

- average class size;
- growth of the total amount of students;
- the amount of schools throughout *aymak*s;
- the number of students in boarding schools.

After reviewing and summing up *aymak* and capital city draft budgets of education, the Ministry of Finance works out the central draft budget, including subsidies for *aymak*s, and presents it to the government.

At present, the budgetary process at pre-schools and general primary and secondary schools is improving. As the curricula (contents of education) at *aymak* and *somon* schools are similar, it is possible to estimate unified norms of variable costs per pupil. Expenditure on heating, electricity, cold and hot-water supply, firewood, coal and transpo . varies depending on the location of pre-schools and schools, types of heating and size of facilities. These costs are fixed. They are estimated according to the local prices. They are added to the total budget estimate without taking into account the aggregated and consolidated budget norms. For all other expenditure there is a norm-variable cost per pupil. As the curricula in primary, lower-secondary and upper-secondary general education are different, the variable costs per pupil are calculated in a different way. These adjustments and coefficients are taken into account as the application range for this norm.

In the process of calculation of variable costs per pupil, the average class size was taken as 35 pupils. This is because in many remote *aymaks* and *somons* the actual class size in schools is relatively small, and these schools require an increased coefficient of expenditure compared to the usual norms. For calculating the costs of the schools in the *somons* in the Altai region, as well as of schools for national minorities and of schools located near the national

border, the higher coefficients are applied. These norms and regulations for budget estimates have been applied since 1998.

Cattle-breeders' children who are attending *somon* general primary and secondary boarding schools are boarders usually accommodated in special boarding schools. For them a separate coefficient of expenditure norms was elaborated as a more expensive unit cost per pupil. Previously, parents of such boarders had to pay an equivalent of 60 kilos of beef per pupil, or provide something in kind. As of 1 January 2000, these charges were discontinued, and the whole expenditure of boarding schools is now financed from the state budget.

In the process of budget estimates it is important to note that it is not only expenditure for the running of the school which is accounted for, but also the amounts of income generated at the school level. These extra-budgetary resources would come from the main school activities (advanced classes, evening classes for specialized subjects, private tuition), or from auxiliary income-generating activities (lease of space, school farming, sports facilities, cultural events, etc.).

Evaluation of budgetary estimates of higher-education institutions and professional-industrial educational centres

The Ministry of Education administers budgets of higher-education institutions as well as professional-industrial educational centres and, consequently, takes part in their preparation and adoption. The process of budget preparation of these educational institutions is similar to that of pre-schools and general primary and secondary schools, except for the following issues. Firstly, individual draft budgets are presented to the Ministry of Education and not to the local financial authorities. Secondly, the income side of the draft budget includes student fees.

Before 1997, it was the Ministry of Education which, together with the Ministry of Finance, set maximal fee levels for education in higher, professional and technical-education institutions. On their basis, educational institutions estimated revenues from the main teaching services. Fees were also charged for supporting auxiliary services, such as research, scientific consultations, leasing facilities, training courses, and private farming.

After estimating income from the main and supporting auxiliary services, educational institutions compared it with expected expenditure for the planned period. Expenditure estimates were made in accordance with the general instruction on expenditure and income estimates of public organizations. The difference between expenditure and income was equal to the volume of state subsidies from the central budget. Then, educational institutions sent their draft individual budgets to the Ministry of Education, which reviewed them on the basis of such indicators as the number of students per teacher and ratio of teaching to non-teaching staff. The reviewed consolidated draft budget was presented to the Ministry of Finance which, in turn, included it into the central state draft budget.

This procedure of budget preparation had the following disadvantages:

- In the process of reviewing budget estimates, the Ministry of Finance imposed limits on subsidies calculated on the basis of maximal fee levels. This, as a rule, caused shortages of funds; made educational institutions search for additional incomes, such as through fee-paying courses; and, finally, had a negative impact on the quality of education.

- Imposing limits on subsidies significantly restricted the autonomy of educational institutions in budget preparation. Moreover, due

to shortages of funds, student fees covered expenditure that had to be financed from the state budget. As a consequence, a number of expected services remained unpaid for. In other words, students did not receive the whole range of services they paid for.

- Due to shortages of funds, some costs of teaching were covered from resources initially aimed at providing scholarships.

In order to eliminate these disadvantages and improve the financing of higher, professional and technical-education institutions, in August 1997, a new system of financing was adopted by the government.

According to the new system, fixed costs for heating, electricity and water supply of state universities, higher-education institutions and colleges, as well as provision of education to one child of a civil servant, are financed from the state budget. All the other educational services are fee-paying. The volume of tuition fees at state higher-education institutions, as well as the volume of credits provided to students of private higher-education institutions, are set by heads of educational institutions and approved by the Ministry of Education. Calculations of fee levels are based on such indicators as the cost of a credit hour and costs of teaching services required in obtaining a Bachelor's degree. Among other extra-budgetary sources of higher-education financing are charity donations and philanthropy, revenue from different income-generating services, revenue from endowments, etc.

Education in industrial-professional educational centres, on the contrary, *is* financed from the state central budget.

IX. EDUCATIONAL CREDITS

There are different forms of state funding of higher-education institutions. One of these forms is through the provision of students with credits (loans) and grants. This new policy encourages higher-education institutions to make efforts to attract more students because each student brings with him/her resources for the financing of these institutions. The principle underlying this scheme is called 'public money follows students'. While the volume of fellowships and other benefits is decreasing, provision of students with credits is becoming widespread.

It is assumed that after graduation from higher-education institutions, students start to enjoy the benefits of knowledge and competence which they obtained through learning and then apply for higher earnings through better-qualified employment. Therefore, it would be appropriate to expect graduates to re-pay at least a part of the public expenditure incurred for their studies in higher-education institutions. One of the main conditions for the successful implementation of the State Programme on provision of students with credits is the development of efficient mechanism for loan repayments. It is expected that in the near future the funds accumulated through repaid educational credits would reduce financing of higher education by the government.

To ensure successful implementation of the state programme there is a need for a viable and effective mechanism of credit repayment. Without such a mechanism, the educational credits may become just the usual type of grants and other assistance to students for studies. One problem that could occur is that if, after graduation from a higher-education institution, a former student is unable to find a well-paid job, then he could find difficulty in making repayments.

Tuition fees are becoming the main funding source for state and private higher-education institutions. With the diversification of financial resources, educational institutions have started to increase the level of their tuition fees in order to maximize their revenues. The governing boards of private higher-education institutions regulate the amount of tuition fees charged themselves, while state educational institutions need to obtain approval from the government authorities in order to increase their tuition fees. As state financing of state higher-education institutions is decreasing, that forces them to increase the level of tuition fees. Sometimes, tuition fees at state higher-education institutions reach the level of tuition fees at private institutions. That prevents some graduates of general primary and secondary schools from entering higher education. High tuition fees force children from low-income families to take credits. The fact that both state and private higher-education institutions actually decide their own level of tuition fees, definitely guarantees them more income but is detrimental for the transition of students from secondary to higher education. This violates the principle of equity and equal opportunities for entering higher education as, at present, it depends more on family wealth than on student abilities. There should be a correlation between the revenues of higher-education institutions from the intake, and the quality of the student body.

In comparison with state higher-education institutions, private higher-education institutions which are not financed from the state budget have more experience in effective institutional management and in searching different funding sources (consultations, tax-exempted donations and other). Estimation of the volume of tuition fees depends on many factors, such as goals and policy of a given higher-education institution, requirements for the balance between income and expenditure, financial situation of students and their families, benefits for students and staff, etc. In reality, decision-making

about the level of tuition fees is not related to the actual expenditure of higher-education institutions, but is determined by the real social demand of the population for specific programmes and courses and its capacity to pay the fees, often established in trial-and-error manner.

In 1992, the State Foundation for Education was founded. Its main function is to provide students with educational credits (loans) and scholarships. Children from low-income families, or from families whose income is less than an estimated minimum, one child per family from families with handicapped parents, and children from single-parent families are eligible for financial assistance. In the course of studies the provision of educational credits is interest free. Students must make repayments within six years of graduation from higher-education institutions.

Orphans, children without guardians and handicapped students at specialized educational institutions are granted scholarships, or their expenses are reimbursed; the monthly value of this aid is estimated at 12,000 tugriks. Students who have won international competitions, or achieved good results in their studies or research, also receive scholarships or are exempted from fees partly or totally. A total of 2.1 billion tugriks is allocated for educational credits for Bachelor programmes at higher-education institutions.

Particular attention is given to training specialists at prestigious higher-education institutions in the developed countries abroad. Since 1997 the number of these students has increased. The studies of, annually more than 200 Mongolian students in Master, Doctor and postgraduate courses abroad are financed from the budget. A total of 2.6 billion tugriks is allocated annually for these purposes. In addition, Mongolian students study abroad according to bilateral government agreements. The State Foundation for Education, which is in charge of the implementation of these agreements, prepares the

agreements, makes administrative arrangements, concludes and evaluates the agreements, and makes estimates of the volume of necessary expenditure. Then the expenditure estimates are reviewed and approved by the Ministry of Finance. After that, the funds required are transferred to the overseas higher-education institutions. A total of 4.7 billion tugriks is allocated for this expenditure annually.

X. OTHER EDUCATIONAL EXPENDITURE

The priority objectives of the Mongolian education system are the publication and distribution of textbooks, as well as their allocation to general primary and secondary-school pupils. The publishing of textbooks is financed from the central state budget. The publishing houses are chosen on the basis of tenders in order to improve content and quality of textbooks. Tender boards choose textbooks and publishers on the basis of a quality-price ratio. Textbooks are distributed at schools depending on their enrolment. Each student has to pay 150 tugriks per year for each textbook on the basis of a revolving fund; the accumulated resources are spent on authors' fees.

Teachers play the most important role in educational development. The quality of education and the efficiency of its reform depend on the knowledge and skills of pedagogical staff. In addition to educational activities, teachers are involved in research. In public higher-education institutions the student/teacher ratio is 14.2, while in private institutions it is 20.6. This makes it necessary for private higher-education institutions to increase the number of their teachers.

In recent years, the average age of teachers has decreased. Thirty-three per cent of all higher-education teachers are young people under the age of 30. Of these, 50.6 per cent have been employed in higher education during 1-10 years. This necessitates the improvement of teachers' training and re-training. The main emphasis is placed on training young teachers and researchers abroad. As a result of development of income-generating activities in higher-education institutions, the salaries of their pedagogical staff are relatively high in comparison with salaries of other civil servants. However, the management at higher-education institutions needs to be improved.

Re-training courses for pedagogical staff are financed on a fee-paying licenced basis. Re-training of teachers and managers is conducted at centrally organized courses in the city of Ulaanbaatar and in the *aymak* regional centres, as well as by means of correspondence courses and self-learning materials.

Teachers who have received a licence have a right to choose the re-training courses. Those who have chosen the courses by correspondence, send their requests for teaching materials to *aymak* or capital city educational centres. In cases where the chosen courses in the city of Ulaanbaatar or in the regional centres are not available, teachers can send their demands for required teaching materials, their price lists, as well as a plan of individual studies to educational centres. Educational centres review these requests and deliver required teaching materials to educational institutions within the time-frame established by the Ministry of Education. For the re-training of one person, it is estimated that 49 hours of studies will need to be costed as follows:

- in cases where teachers study at the re-training courses in the city of Ulaanbaatar, the educational costs are estimated at 45,000 tugriks for teachers from the regions, and at 9,000 tugriks for teachers who live in Ulaanbaatar;
- in cases where teachers study at the re-training courses in a region, the educational costs are estimated at 30,000 tugriks for those who have arrived from other *aymaks* or *somons*, and at 7,000 tugriks for those who live in the given region.

Teachers who study individually can receive teaching materials to a total cost of 20,000 tugriks. The volume of these norms is expected to be indexed according to the inflation rate. These norms have been applied since 1998 and they seem to be appropriate for further application.

Among other categories of recurrent educational expenditure are:

- participation of Mongolian students in international competitions;
- counterpart Mongolian funding for the implementation of international research projects;
- funds for development of non-formal education;
- transportation of students in such remote regions as *Bayan-ulgi, Uvs, Hovd, Gobi-Altai, Zavchan aymaks;*
- allowances for urban public transportation of professional-education students should be planned in the institutional budget and covered by the institution itself from its own resources.

A significant portion of recurrent expenditure of educational institutions is spent on the wage bill and various indemnities and allowances for social welfare. See figures below for 1995 to 1998.

	1995	1996	1997	1998
Total volume of recurrent expenditure in the education sector	100	100	100	100
Share of wage bill (percentage)	39.1	40.7	39.8	38.2

Of the wage bill, 29 per cent is spent on indemnities and allowances for social welfare; 90 per cent of this spending is covered by the employer, while 10 per cent is covered by the employee. Before 1997, basic salaries were estimated by central authorities in accordance with a unified framework of remuneration. In order to estimate the wage bill, it was necessary to determine the number of teachers, taking into account such factors as workload, class size and student/teacher ratio.

Teachers' earnings consisted of basic and supporting salaries. Supporting salaries were determined on the basis of the instruction approved in 1995 by Ministers of Education, Labour and Finance.

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According to this instruction, teachers received bonuses for qualifications and professional skills. With regard to the wage bill of non-teaching personnel, it was determined on the basis of the ratio of teaching to non-teaching personnel. For the time being, the average ratio is 60:40.

Since May 1997 a new mechanism of wage-bill planning has been introduced. According to the decision approved by the government in 1997, the previously used unified framework of remuneration in social sectors ceased to exist and became a benchmark; i.e. it determined only the minimum level of wages and salaries per person. As a result, the wage bill for the first half of 1997 became a basis for the following estimates. In the meantime, the wages and salaries of educational staff are calculated by educational institutions themselves. In other words, educational institutions have a right to define the number of staff and the amount of salary for each worker. This allows to vary the wage structure according to teachers' competence and efficiency.

XI. EXPENDITURE ON EDUCATION FOR ONE CHILD OF A CIVIL SERVANT

According to the Law on the Civil Service, the education of one child of a civil servant, at a 'special secondary' or higher-education institution, is financed from the state budget. This financing is conducted within the time-frame established by the Ministry of Education for completing education and training in a given educational institution. The volume of financing depends on the type of educational institution and on the chosen-profession profile. It is established by educational organizations jointly with the central financial organizations by 15 May of each academic year.

The volume of financing at private educational institutions is established on the basis of the volume of financing at identical public educational institutions. The warrant-holders of the educational institutions, in charge of budget preparation and execution at the institutional level report annually on the expenditure for education of civil servants' children. Following this, the costs of this education are reimbursed by the state to respective educational institutions. This expenditure is reimbursed only during the civil servant's tenure. As recorded for 2000, 13,283 students have received this kind of financial aid, estimated at 3,188.1 million tugriks.

XII. PROCESS OF BUDGET IMPLEMENTATION

The state budget consists of the central and local budgets. The central budget is administered by the government, while local budgets are administered by mayors of corresponding levels. Accounting offices prepare the financing schedule on a quarterly and monthly basis and make expenditure allocations depending on revenues. The government reviews quarterly reports on central budget implementation and presents its proposals to Parliament (*khural*). Warrant-holders administer allocated budgetary expenditure only through operations between bank accounts.

The schedule of subsidy allocations from the central budget to *aymak*s (the capital city) is approved by the Ministry of Finance on the basis of proposals by local authorities; the similar schedule for *somon*s and regions is confirmed by mayors of corresponding levels. Mayors inform the local authorities (local khurals) of the *aymak* (capital city) about the regional budget implementation, while the government presents the results on the central budget implementation to Parliament.

The monthly procedure of reporting on the implementation of the expenditure and income sides of the budget is the following. *Somon* and regional mayors inform authorities at the upper levels of administration not later than the first day of the following month; mayors of *aymak*s and of the capital city present their reports to the Ministry of Finance not later than the third day of the following month. The balance of current accounts (income and expenditure) is made through banking statements according to the Law on Banks.

Presentation and approval of reports on budget implementation are made according to the following scheme. Accounting officers present their reports, i.e. the officer directly in charge of budget preparation presents a quarterly report on budget implementation to the corresponding central or upper-level authority not later than the fifteenth day of the first month, while an annual report is presented before 25 January of the following year. Accounting officers in charge of *somon* and regional budgets make, in turn, their six-monthly and annual reports. Six-monthly reports are presented to the accounting authority of *aymak*s and of the capital city not later than 25 July, annual reports not later than 5 February of the following year. Accounting officers in charge of *aymak* and the capital city budgets, in turn, present the six-monthly report to the Ministry of Finance before 5 August and the annual report before 20 February of the following year. The accounting authority in charge of the central budget (the Ministry of Finance) makes a six-monthly report not later than 1 September, and an annual report not later than 15 March of the following year. The annual report on the central budget implementation is therefore presented by the government at the spring session of Parliament.

In the meantime, mayors of *aymak*s, the capital city, *somon*s and regions present their reports on budgetary implementation, together with the draft projects for the following year, to Parliament and local khurals. After discussions and approval of reports, the Parliament and local khurals adopt them.

Control over rational allocation of budgetary expenditure

At the state level, control over income and expenditure allocation is held by the State Revision Committee through its central and territorial bodies. There is also a special control division in the

Ministry of Finance: the state financial control service. Moreover, each *aymak* has its own territorial financial service, responsible for implementation of the Law on the Budget. All these institutions make up the system of financial control over budget implementation.

XIII. EDUCATION BUDGET FOR 2000

The education sector is considered one of the government's priorities for the year 2000 because of its potential in terms of human resources. The fact that education will be strongly demanded by the population in the years to come makes it a product or service determined by the law of supply and demand. The Mongolian population realizes more than it did before the value of education as a marketable good which should bring a set of returns and benefits to the final consumer. This mental shift is a critical sign of the present times, characterizing the transition from the centrally planned to a market economy.

The restructuring of the education system in the forthcoming years will be conducted by the government in several stages. The legal base for these reforms has already been prepared, creating incentives for growing demand for education. Enrolments in educational institutions and, particularly, in professional educational institutions are growing, indicating a trend for professional and technical studies in the overall education system.

Due to student flows from the lower levels of the education system, the demand for higher education in general, and its specific specializations in particular, is expected to surge in quantum leaps. This would require more control and supervision over higher-education institutions with a view to ensuring their accreditation and licencing.

The content of education at general primary and secondary schools is being revised accordingly to meet the advanced needs of the upper levels of education. The statistical analysis shows that among the students of higher-education institutions (both public and

private) 9.8 per cent are children of cattle-breeders, 16.5 per cent have elderly parents, 35.2 per cent are children of civil servants, 21.4 per cent are children of non-civil servants and 17.1 per cent have family away from their place of studies.

In 2000, the total volume of public expenditure on education was estimated at 70,219.5 million tugriks (or 16.9 per cent of total government expenditure) exceeding the volume of educational expenditure in 1999 by 8,886.8 million tugriks (or 14.5 per cent more than was planned in the revised state budget for 1999). According to the law, educational institutions should be financed from the state budget, tuition fees and other extra-budgetary resources. Tuition fees represent 12.4 per cent of the total educational expenditure, that is by 2.3 percentage points less than the average percentage during the past three years.

In the process of estimation of educational expenditure for 2000, the following factors were taken into account:

- maintenance, equipment and facilities required for the educational process at all levels of instruction;
- teaching and learning conditions conducive to the purpose of education;
- staff salaries for teaching and non-teaching staff with incentives for improvement in their performance.

At the national level, a total of 35,643.7 million tugriks was planned to be spent on the education of 472,400 students at 630 general primary and secondary schools. A total of 11,041.2 million tugriks was allocated for pre-school educational institutions.

In the process of preparation of the general primary and secondary education budget the norms of variable costs per student,

as well as expenditure not included in norms (on electricity, water, transport and education of one child of a civil servant) have been taken into account. For calculating variable costs at schools located in remote regions and at schools for ethnic minorities where class size is below the estimated level, an increased coefficient of 1.3 has been applied.

In 2000, 2,215.3 million tugriks (269.4 million more compared to 1999) are expected to be allocated for the education of 13,200 students at 28 professional-industrial educational centres. Due to the growth in enrolments at professional-industrial educational centres, and as the graduates of Grade 8 were exempted from fees, the volume of state funding has increased to 1,695.2 million tugriks, or by 21.8 per cent.

In the 1999-2000 academic year, public higher-education institutions, universities and colleges enrolled 46,500 students, or 6,000 more compared to 1999. The total budgetary expenditure for higher-education institutions is 9,852.5 million tugriks, 21 per cent of which (or 2,069.7 million tugriks) is allocated for heating, electricity, water and education of one child per family in families of civil servants.

In comparison with 1999, higher-education expenditure has increased by 84.9 per cent. In addition, 17,600 students of 21 state and of 86 private educational institutions receive credits and scholarships financed from the State Foundation for Education. Orphans, handicapped students and students from families with income below the poverty line are eligible for this financial aid, to a total amount of 2,616.9 million tugriks to be paid from the state budget in the year 2000. With the growth in the number of accredited and licenced higher-education institutions, so has the number of students benefiting from educational grants and credits (loans) increased.

The expenditure on education with regard to Master and Doctor courses abroad is estimated at 2,670 million tugriks, which is equal to the level of 1999. In 2000, 40 students were admitted to foreign educational institutions, but not all of them have received final permission from these institutions to start their studies.

In 2000, 994,000 tugriks (the level of 1999) were planned to be spent for the publication of a new generation of textbooks for general primary and secondary schools. It was planned to publish in 1995-2000 113 new textbooks. In fact, only 86 textbooks were published in 1995-1999, and an additional 18 in 2000. The programme on renewed editions of textbooks for general primary and secondary education has now ended.

According to the approved norms for 2000, 176,000 tugriks from the central budget were allocated for advanced training/re-training of 6,087 teachers and educational managers. Expenditures for the organization of national and international competitions on physics and mathematics, for transportation of students in five remote *aymaks,* for conducting state examinations at general primary and secondary schools by the state examination committees, for non-formal education and for the implementation of the Programme for educational development were estimated at the same levels as for 1999.

Additional analyses and data are available in the statistical tables and annexes attached.

XIV. BEHAVIOUR OF ACTORS

During the budget preparation phase there are no political disagreements between the Ministries of Education and Finance. The negotiation process between the Ministry of Education and the Ministry of Finance begins with the elaboration of a project on the main directions of the state with regard to social and economic development. Firstly, the Ministry of Education plans the main strategic measures and presents them, together with corresponding calculations, to the Ministry of Finance. The Ministry of Finance adjusts estimates of funds required for the financing of expected measures for the planned period. The Ministry of Finance has a right to request supporting materials and calculations. Controversial issues should be solved during negotiations. However, in practice, initial estimates of the Ministry of Education, as a rule, remain unchanged.

During negotiations on the main directions of education development for the planned period and on the draft budget for the education sector, the Ministry of Education is represented by the head and executive officers of the Department for co-ordination of scientific, educational and cultural policies; the Ministry of Finance by the head and executive officers of the Department of budgeting policy.

All problems should have been solved before projects giving main directions of state social and economic development, together with the central draft budget, are presented to the government. In practice, there are no exact terms of reference and schedule of negotiations between ministries. As a rule, the main controversial issue of the education draft budget discussed in the Ministry of Finance is determining the ratio of state subsidies to income from basic and

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supporting activities of educational institutions. The Ministry of Finance wishes to increase the share of income from supporting auxiliary services of educational institutions, whereas the Ministry of Education would like to increase the share of subsidies.

Another problem is determining the amount of capital expenditure for major repairs and procurement of teaching equipment. Capital expenditure is covered by income from privatization. The Ministry of Education presents a detailed plan of major repairs required for school facilities and teaching equipment needed, taking into account their poor condition. However, this plan is not always implemented because of financial constraints. In other words, the supply of capital in the education sector does not meet real demand. Therefore, the main cause of disagreements between the Ministry of Education and the Ministry of Finance is the shortage of funds.

APPENDIX 1

THE CENTRAL ASIAN CONTEXT AND THE RATIONALE OF THE IIEP PROJECT ON CAPACITY BUILDING IN BUDGETARY PROCEDURES FOR EDUCATION

The Central Asian countries of the former Soviet Union and Mongolia were less developed economically than other regions of the ex-USSR and other centrally planned economies. Mineral resources and agriculture were key sectors of Central Asian economies, which made them dependent on aid and subventions from other regions of the former Soviet Union. While private education was not allowed during the times of the then USSR, free public education and other social sectors were strongly subsidized by the state authorities. In fact, education, as other social sectors, was a state monopoly. Projects with foreign donors were non-existent until 1992.

Traditionally, according to the then Soviet policy, primary and secondary levels were compulsory, the quantitative indicators of adult literacy, access, coverage and gender equality were very high. The centralized planning, administration and management of education ensured for decades that adequate numbers of school buildings, teachers, textbooks etc. were put in place according to the established state norms. In addition, huge funds were spent to subsidize school meals, heating in winter and related expenses.

This 'socialist' strategy was designed to show an example of absolute social harmony, fully meeting social demand at compulsory and universal primary and secondary levels, and to use manpower projections in higher education for mathematically and economically ideal insertion of graduates in the planned labour market.

At the national level, planning and provision of primary and secondary education in the former Soviet Union (except for the absence of private schools and user fees for education) were not very much different from centralized European models. These two levels during the times of the former Soviet Union indeed performed their social function and guaranteed total access and coverage of education to each particular district.

With regard to higher education, by Western standards, it was too prolific (production over-capacity of graduates and Ph.D. level was evident), too narrowly specialized and oversubsidized by the state in terms of its totally free provision, huge teacher and student numbers, expensive teacher salaries, student fellowships and plenty of other benefits. The value-for-money ratio (or to use more economic jargon, rates of return to education) at the level of higher and postgraduate education was the never-resolved problem of the Soviet educational model. Always rising in quantitative indicators (number of universities, enrolments, disciplines etc.), Soviet higher education in reality performed poorly in quality and output, as well as in the external efficiency of graduates.

The overall quantitative performance and outputs of educational planning in the former Soviet Union were impressive and kept at the levels of the developed countries until 1991, due to strong state commitment, powerful centralized control and supervision and virtually unrestrained public funding.

This generous social policy, although costly for the state budget, was considered one of the most important social objectives and achievements of the so-called 'socialist' state. Clearly, it was a supply-driven model, based on a top-down approach, when quantitative parameters had overwhelming priority over qualitative and output indicators, as well as individual human characteristics.

Putting aside the rigid and ideology-biased curriculum, this model was also rightly criticized for its extreme equalization of student abilities and lack of choice for studies at compulsory levels. However, even the gigantic state funding was never sufficient to follow the planned norms and policy objectives. Teachers were normally paid less than other civil servants, school construction was often delayed and caused double and even triple shifts, the shortage of textbooks explained the practice of their rotation at schools, maintenance and repairs were chronic problems.

Moreover, educational funding increasingly faced financial constraints when the centrally planned mechanisms in the whole Soviet Union began to crumble in the eighties. The spiralling inflation devalued teacher salaries, school construction was frozen and provision of textbooks, school furniture, stationery and other school infrastructure was disrupted.

After the collapse of the Soviet Union in 1991, the initial illusions of the possibility to mix the performance of the 'socialist' educational model with the transition to a market economy soon disappeared. Political debates in the parliaments on free *versus* fee-paying education still continue but the realities are such that even hardline populists are convinced that free universal public education, heavily subsidized by the state, cannot survive in tough market-economy conditions.

The two could not match *a priori* because the underlying preconditions of the past model had been eliminated – centralized planning and control were abolished, decentralization gave major responsibilities for financing of primary and secondary education to regional authorities, public funding and subsidies were drastically cut and alone were not enough to continue educational funding on the basis of previous government norms, the market conditions raised

prices for all previously subsidized elements of teaching and learning conditions, new diversified demand for education required additional investments to update obsolete courses, to change the alphabet, to prepare new textbooks, to retrain teachers, to develop unconventional methods of education delivery, such as distance education etc. In brief, the obvious shortage of real public funds for provision of education according to the past patterns, was made worse with the necessity to spend more than before on new reforms and innovations.

Not only was there an increasing shortage of public funds for education, even those resources available were not necessarily well planned, programmed, allocated, spent and audited. The economic recession which accompanied the transition to a market economy in the early and mid-1990s, astronomic rates of inflation, inability of regions to provide on their own sufficient funding for primary and secondary levels, numerous public administration reforms and staff cuts brought about serious difficulties for educational budget preparation and implementation, such as delays and arrears in payment of teacher salaries and student fellowships. The practice of preparation and adoption of unrealistic budgets (under pressure from parliaments, trade unions and local leaders) added problems to the phase of implementation when each budget had an emergency nature and ultimately became a 'patchwork'.

In one way or another, since 1991, all countries of the former Soviet Union and Mongolia have had to copy Western approaches in the organization and management of their education systems. In terms of educational finance and budgeting under the market conditions, all former centrally planned economies had to face the following challenges:

- public education cannot be totally free, cost-sharing, cost-recovery and income-generation should be introduced, in particular at non-compulsory levels;
- instead of being supply-driven by the state, education should become demand-oriented as the state limits its intervention and major funding to compulsory levels and leaves the market to guide pre-school, higher and vocational and technical education;
- public education loses its monopoly over education, including at compulsory levels, and allows private education to meet the diversified demand for specific quality and types of education.

These essential changes were facilitated by the overall reform of public administration, initiated by the governments of the former centrally planned economies together with the IMF, the World Bank and its branch responsible for Asia - the Asian Development Bank.

Having started from the same initial point in 1991, the Central Asian countries (and earlier Mongolia) displayed a variety of policies and strategies to address the same or similar problems of educational reforms and their funding in a decentralized context. They were confronted with previously unknown administrative and managerial problems, such as project documentation for the IMF and ADB loans. Moreover, they lost any channels of communication between each other which increased the natural risk of repeating the same mistake. There were many requests from the Central Asian countries and Mongolia concerning their critical needs:

- to have a sub-regional stock-taking exercise to consolidate and summarize the various country experiences and examples of financial management and budgeting in education since 1991;
- to make a comparative analysis of these experiences to review the reasons for their successes or failures, their strengths and weaknesses, pros and cons, advantages and disadvantages in a comparative perspective;

- to provide Ministries of Education in each country with useful sub-regional and international references for their own internal and national policy analysis and decision-making in the vital area of educational finance and budgeting.

Project description and methodology

In 1997, in Ulaan Baatar (Mongolia), the IIEP launched a sub-regional research project on capacity building in budgetary procedures for education in Central Asia and Mongolia.

The key objectives of this research project were to analyze administrative and technical procedures applied to prepare the budget in a given Ministry of Education, to allocate the budgetary resources within the education system and to implement the budget in conformity with government strategy. This analysis also looked into the roles of various actors involved, their respective positions, weaknesses and strengths, articulation of budget preparation with planning and management, use of projections and methods of budget rationalization of budget preparation and implementation.

The expected outcomes of the project were:

- preparation of descriptive and analytical studies on educational finance and budgeting in each of six participating countries (Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkmenistan and Uzbekistan), as well as their comparative analysis;
- exchange of views and experiences on educational policies and strategies in the area of educational finance and budgeting in the region of Central Asia and Mongolia;
- elaboration of conclusions and recommendations on improvements in educational finance and budgeting in the countries concerned;

- publication by the IIEP of six national reports (research studies) and their synthesis in both English and Russian, which should serve useful references for public administrations in the participating countries.

The methodology of the project linked research with development of national capacities in financial management and budgeting in education. In each country a national team was set up, comprised respectively of two senior-level experts from the Ministry of Education and Ministry of Finance. In each country these two experts became a nucleus for the analysis and reflections on budgetary procedures and practices in a comparative perspective with other countries of the region and with the international expertise of the IIEP.

The formula of the project enabled two key government bodies in the same country in charge of educational finance (Ministry of Education and Ministry of Finance) which might have opposing or even conflicting interim views over the sensitive issues, to be unified into one national team. The opportunity also arose to establish better understanding and co-operation through meeting other national teams, composed in a similar inter-agency way, from the neighbouring countries.

It is noteworthy that in spite of the serious economic constraints, regional political problems and usual staff overload, all six national teams actively participated in the project and made considerable efforts to achieve its objectives.

The first meeting of the project took place in Ulaan Baatar (Mongolia) in 1997. It discussed and adopted the terms of reference for the project and basic guidelines for the national reports (case studies).

The second meeting was held in Samarkand (Uzbekistan) in 1998 to jointly review the descriptive parts of the national reports among all participating parties and to progress towards their analytical parts.

The third and last meeting, which had an in-depth analytical nature, took place in 1999 in Cholpon Ata (Kyrgyzstan). It summarized the findings of all national reports and focused on critical issues of common concern – what conclusions could be drawn from this comparative analysis and what improvements were feasible in financial management and budgetary procedures for education.

Under the project formula, the national reports should be published by the IIEP in two languages (English and Russian), subject to their readiness and compliance with the approved basic guidelines. The Mongolian report is the fifth report to be published by the IIEP in this series. It provides the case of a country which used a 'shock therapy' approach to economic and social reforms. Following advice from the IMF and Asian Development Bank, educational finance and budgeting were radically reformed when the government subsidies were drastically reduced or discontinued, and much financial burden was placed on parents and students as final consumers of educational services.

The English and Russian versions of the report are mostly authentic and identical, except for some differences in presentation of the text which serve the purpose of sending the message as clearly as possible.

Country profile of Mongolia

Mongolia is a land-locked country located between Russia and China. In spite of its vast territory, due to the difficult climate its population was only 2.4 million in 1999. The climate has exceptionally sharp variations in temperature not only between the seasons of the

year, but also in the course of a day. The climate and geographical characteristics of the country largely explain the traditional nomadic and agrarian lifestyle of the population. The ethnic composition of the Mongolian population is fairly homogeneous – about 80 per cent are Khalkha Mongols. The predominant religion is Lamaist Buddhism.

Before the collapse of the former Soviet Union, Mongolia was part of a group of so-called 'socialist' or centrally planned economies. Its economy heavily depended on financial and economic assistance from the former Soviet Union, otherwise it was based on animal herding and mining. Due to diminishing aid from the former Soviet Union in the course of the eighties, Mongolia had to start its transition to a market economy and the IMF-led structural adjustment programmes earlier than Central Asian republics of the former USSR.

The reforms had a 'shock therapy' nature and caused severe and prolonged recession and austerity at the end of the 1980s and to the early 1990s. Officially, some 20 per cent of the population live below the poverty line. More recently, economic growth has stabilized, reaching up to 6 per cent a year, but the GDP per capita is very low by regional standards – US$335 in 1999. The state budget allocations to social sectors, including education, are constantly declining in real terms as more burden is placed on parents and students through cost-sharing and cost-recovery mechanisms.

The consumer price index (base 100 in 1991) jumped from 364 index points in 1992 to 1,340 in 1993 and grew to 9,253 in 1998. The implicit GDP deflator (base 100 in 1993) surged to 167 index points in 1994 and 440 in 1998. The national currency is called the tugrik. Its value against US$1 decreased from 10 tugriks in 1991, to 550 tugriks in 1995 and 1,080 tugriks in 2000.

Administratively, Mongolia is divided into 21 aymaks (provinces), and the capital city of Ulaanbaatar, having aymak status. According to the Constitution, the legislative power of the republic resides in the Great Khural (the Parliament). In the 1990s, due to the austerity measures the number of ministries was reduced from 50 to 11, while many services were privatized and sub-contracted. The current name of the Ministry in charge of the education sector is the Ministry of Science, Technology, Education and Culture.

In the 1990s Mongolia inherited a former Soviet model of education, with the gross primary enrolment rate effectively at 100 per cent and the adult literacy rate at 97 per cent. The market reforms brought strong pressure on government funding for education and especially on non-salary expenditure. However, due to the subsistence lifestyle of the Mongolian population, the indicators of internal efficiency did not fall steeply, in particular at the compulsory levels of primary and secondary education.

In the case of Mongolia, the compact size of the country and its population, the subsistence type of economy and lifestyles, made it possible to experiment with many pioneering changes in cost-reduction and cost-efficiency of education, related to market reforms. In this sense Mongolia served as a testing ground for such innovations as tuition and user fees, student loans and private education, when they were later brought by the ADB to the Central Asian republics of the former Soviet Union.

Educational budgeting has the following features:

- expenditure for education was declared a (protected) item of the government budget by law, and should receive not less than 20 per cent of total government expenditure (at present it is in the range of 15-17 per cent);

- the estimates for government funding are based on unit cost per pupil and are mostly designed to cover fixed costs only (essential services, heating, electricity and other utilities), while variable costs should be covered through extra-budgetary funds and income-generation;
- from 1998, educational legislation was amended to reduce the cycle of compulsory education to eight grades (four years of primary and four years of lower-secondary education);
- teaching staff in primary and secondary education are being retrenched, while pupil/teacher ratio, class size and workload of teachers should increase;
- cost-recovery (student loans) and cost-sharing (tuition fees) are practised in higher and secondary special (colleges) institutions; in 1997, the maximum allowed ceilings for tuition fees controlled by government were discontinued, and the rapid increase in fees caused student demonstrations;
- tuition fees (introduced only recently) were abolished in vocational and technical institutions due to low demand;
- educational vouchers are planned for primary and secondary levels to encourage competition between schools;
- expenses for heating, electricity and school meals continue to be important items of expenditure, in particular for regional/local budgets (up to 30 per cent of recurrent budget);
- Mongolia was the first former centrally planned economy in the region to start large-scale education development projects with foreign donors and to take a loan from the ADB for this purpose.

APPENDIX 2

CAPACITY BUILDING IN BUDGETARY PROCESSES FOR EDUCATION IN CENTRAL ASIA AND MONGOLIA
THIRD MEETING OF THE PROJECT (ANALYSIS OF KEY ISSUES IDENTIFIED, THEIR SYNTHESIS AND CONCLUSIONS)

Cholpon Ata (Issyk-Kul), Kyrgyzstan, 21-25 June 1999

Programme of work

21 June, Monday

9.30-10.30 – Opening ceremony
Introduction of participants
Speeches by Kyrgyz officials
Speech by IIEP/UNESCO Representative
– Presentation of participants/Organization of work

10.30-11.00 – Tea/coffee break

11.00-12.30 – Programme budgeting techniques in education (example provided by Kyrgyzstan)

12.30-14.00 – Lunch

14.00-15.30 – Application of programme budgeting techniques (continued): examples from Kazakhstan and Mongolia

15.30-16.00 – Tea/coffee break

16.00-17.30 – Structure of the central (state) and regional educational budgets and its transparency (examples from all countries)

22 June, Tuesday

9.00-10.30 – Evaluation of cost implications for educational budgeting (costing of the Uzbek national programme of personnel training)

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10.30-11.00 - Tea/coffee break
11.00-12.30 - Discussion on application of costing norms for educational budgeting in the countries of the region (all countries)
12.30-14.00 - Lunch
14.00-15.30 - Impact of decentralization on the role of Ministries of Education and regional authorities in educational budgeting (examples from Tajikistan and Turkmenistan)
15.30-16.00 - Tea/coffee break
16.00-17.30 - Articulation between planning and educational budgeting at central and regional levels (all countries). Discussion

23 June, Wednesday

9.00-10.30 - Cost-sharing in education: application of tuition and user fees (examples from Kyrgyzstan, Mongolia and Kazakhstan)
10.30-11.00 - Tea/coffee break
11.00-12.30 - Cost-recovery in education: application of student loans (example from Mongolia). Discussion
12.30-14.00 - Lunch
14.00-15.30 - Income-generation at school level and its tax-exemption (example from Uzbekistan)
15.30-16.00 - Tea/coffee break
16.00-17.30 - Private education development and school vouchers (examples from Mongolia, Kyrgyzstan and Kazakhstan)

24 June, Thursday

9.00-10.30 - Budget implementation: release of funds, transfers, payments, arrears (examples from Tajikistan, Turkmenistan and Kazakhstan)

10.30-11.00 - Tea/coffee break
11.00-12.30 - Management of wage bill of teachers (examples from all countries)
12.30-14.00 - Lunch
14.00-15.30 - Evaluation of budget implementation: accountability and auditing at different levels (examples from all countries)
15.30-16.00 - Tea/coffee break
16.00-17.30 - Accountability and auditing in education (continued)

25 June, Friday

9.00-10.30 - Organization of educational finance and budgeting in developed countries (examples from France and the Netherlands)
10.30-11.00 - Tea/coffee break
11.00-12.30 - France and the Netherlands (continued)
12.30-14.00 - Lunch
14.00-15.30 - Synthesis of discussions and recommendations
15.30-16.00 - Tea/coffee break
16.00-17.30 - Closing ceremony

Table 1. Variable costs per student of capital city and *aymak* schools

Aymak	Variable costs per student (in tugriks)		
	Lower level	Medium level	Upper level
Arhangai	44,494	54,191	60,658
Bayan-Olgi	47,412	59,090	61,800
Bayanhongor	44,766	54,463	60,930
Bulgan	44,494	54,191	60,658
Gov-Altai	45,220	54,917	61,384
Dornogov	44,544	54,945	60,708
Dornod	44,766	54,463	60,930
Dundgov	44,150	53,847	60,314
Zavhan	45,220	54,917	61,384
Ovorhangai	44,150	53,847	60,314
Omnogov	44,716	55,117	60,880
Suhbaatar	44,766	55,167	60,930
Selengi	44,214	53,911	60,378
Tov	43,961	53,658	60,125
Uvs	45,536	55,937	61,700
Hovd	45,536	55,937	61,700
Hovsgol	44,802	54,499	60,966
Henti	44,372	54,069	60,536
Darhan	43,820	53,517	59,984
Ulaanbaatar	42,723	52,420	58,887
Orhon	43,928	53,625	60,092
Gov-sumber	44,033	53,730	60,197

US1 dollar = 1,050 tugriks

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Table 1. Variable costs per one student of capital city and *aymak* schools (continued)

Aymak	Share of variable costs per student allocated for salaries and allowances (percentage)		
	Lower level	Medium level	Upper level
Arhangai	92.6	93.9	94.6
Bayan-Olgi	90.6	92.5	92.8
Bayanhongor	92.0	93.5	94.2
Bulgan	92.6	93.9	94.6
Gov-Altai	91.1	92.7	93.5
Dornogov	92.5	93.9	94.5
Dornod	92.0	93.5	94.2
Dundgov	93.3	94.5	95.1
Zavhan	91.1	92.7	93.5
Ovorhangai	93.3	94.5	95.1
Omnogov	92.1	93.6	94.2
Suhbaatar	92.0	93.5	94.2
Selengi	93.2	94.4	95.0
Tov	93.7	94.9	95.4
Uvs	90.5	92.3	93.0
Hovd	90.5	92.3	93.0
Hovsgol	92.0	93.4	94.1
Henti	92.9	94.1	94.8
Darhan	93.5	94.6	95.2
Ulaanbaatar	95.9	96.6	97.0
Orhon	93.2	94.5	95.0
Gov-sumber	93.6	94.7	95.3

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Table 2. Coefficient for calculating variable costs per one student in remote schools

	Remoteness from *aymaks*			Remoteness from *somon* centres		
Aymak and capital city schools	Up to 50 km	50-150 km	Above 150 km	Up to 30 km	Above 30 km and *Bayantul* school in *Gov-sumber aymak*	Specialized schools for handicapped
I zone	II zone	III zone	IV zone	V zone	VI zone	VII zone
1.0	1.016	1.048	1.083	1.121	1.300	2.955

Table 3. Variable costs per student in boarding schools

Aymak	Variable costs per student
Arhangai	105,575
Bayan-Olgi	105,180
Bayanhongor	105,160
Bulgan	105,443
Gov-Altai	106,047
Dornogov	106,325
Dornod	105,112
Dundgov	105,682
Zavhan	105,570
Ovorhangai	106,003
Omnogov	106,091
Suhbaatar	105,399
Selengi	105,760
Tov	106,237
Uvs	105,000
Hovd	105,891
Hovsgol	105,375
Henti	105,477
Darhan	105,920
Ulaanbaatar	106,671
Orhon	105,048
Gov-sumber	105,730

Table 4. Variable costs per student in professional-industrial educational centres (lower level of education)

Profession	Variable costs per student (in tugriks)	Coefficients by zone Remoteness from capital city			
		0 km I zone	150-500 km II zone	500-1,000 km III zone	Above 1,000 km IV zone
Food industry	129,900	1.0	1.03	1.06	1.09
Textile industry	130,100	1.0	1.03	1.06	1.09
Services	131,100	1.0	1.03	1.06	1.09
Construction	130,600	1.0	1.03	1.06	1.09
Agriculture	131,400	1.0	1.03	1.06	1.09
Engineering	131,400	1.0	1.03	1.06	1.09

Table 5. Number of students per level of instruction (in thousands)

	1995	1996	1997	1998	1999	2000
Pre-schools	65.5	67.9	70.0	68.0	71.3	72.4
General primary and secondary schools	403.8	418.3	435.1	452.6	447.4	472.4
Professional industrial educational centres	8.1	8.1	9.7	9.8	13.9	13.2
Colleges	7.8	7.4	8.0	4.2	8.7	10.3
Universities and other higher-education institutions	19.0	17.5	18.6	20.2	31.8	36.2
Private educational institutions	8.9	11.8	14.4	19.1	19.3	22.6
TOTAL	513.1	531.0	555.8	573.9	592.4	627.1

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Table 6. Classification of educational expenditure (in million tugriks)

	1999 (precised plan)	2000 (project)	Percentage	2001 (project)	2002 (project)
1. Consolidated Mongolian budget					
Total expenditure	61,332.7	70,219.5	114.5 %	71,734.7	73,055.3
Including:					
Recurrent expenditure	58,995.4	67,840.1	115.0 %	71,734.7	73,055.3
Capital expenditure	2,337.3	2,378.4	101.8 %	-	-
Number of institutions	1,385	1,389	100.3 %	1,389	1,389
Number of staff	48,255	48,138	99.8 %	48,138	47,868
2. State central budget					
Total expenditure	21,076.2	22,130.3	105.0 %	21,137.0	21,137.0
Including:					
Recurrent expenditure	18,738.9	20,050.9	107.0 %	21,137.0	21,137.0
Wage bill	4,511.2	5,347.6	118.5 %	5,366.4	5,366.4
Allowances (of employer)	1,143.4	1,319.3	115.4 %	1,324.3	1,324.3
Electricity	618.1	646.1	104.5 %	652.9	652.9
Heating	1,500.7	1,615.5	107.6 %	1,625.8	1,625.8
Transportation	204.1	205.6	100.7 %	205.6	205.6
Uniforms	157.4	154.0	97.8 %	154.5	154.5
Meals	217.9	217.9	100.0 %	220.9	220.9
Water supply	495.0	470.1	95.0 %	470.1	470.1
Other	9,891.1	10,074.8	101.9 %	11,116.5	11,116.5
Capital expenditure	2,337.3	2,079.4	89.0 %	-	-
Number of institutions	70	70	100.0 %	70	70
Number of staff	7,206	7,116	98.8 %	7,116	7,116
3. Reference					
Share of GDP	6.1%	6.3%		5.7%	5.2%

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Table 7. Financial sources of education budget in 1998-2000

Financial sources	1998	1999	2000
Tuition fees	8 536.4	9 016.1	8 701.0
Extra-budgetary sources	1 924.6	1 405.1	1 358.9
Budgetary sources	42 990.8	50 911.1	60 159.6

Table 8. Number of students received credits from the State Educational Foundation (in thousands)

	1995	1996	1997	1998	1999	2000
Public educational institutions	8.0	7.1	6.6	6.2	11.9	14.0
Private educational institutions	-	0.9	0.6	0.4	0.9	3.6
TOTAL	8.0	8.0	7.2	6.6	12.8	17.6

Table 9. Education system in Mongolia

Pre-school education	Primary education	Non-complete secondary education	Complete secondary education	Higher education

Kindergartens	Primary schools	General secondary schools	General secondary schools	Universities (4-5 years)	Postgraduate studies
			Professional industrial educational centres	Colleges	

No. of years of studies	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Age of students	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27

Table 10. Indicators of education system

Indicators	1995-1996	1996-1997
Educational expenditure (in million tugriks)	23,525	29,911
Enrolment in higher education (percentage):		
- state	78	74
- private	22	26
Capital investments:		
- capital repairs, professional educational institutions	64.3	74.5
- equipment	200	32.5
Number of state universities, other higher-education institutions and colleges	29	29
Number of students	29,167	31,391
Number of teachers	2,693	2,683
Number of private universities, other higher-education institutions and colleges	41	51
Number of students	8,930	11,861
Number of teachers	383	522
Number of professional and 'special secondary' educational institutions	34	33
Number of students	7,987	11,308
Number of teachers	495	767
Number of general primary and secondary schools	664	658
Including:		
primary	83	79
non-complete secondary	232	208
complete secondary	349	371
Number of students	403,847	418,293
Number of teachers	19,411	20,090
Drop-outs	4.29	3.53
Number of kindergartens	660	667
Number of children	64,086	67,972
Number of teachers	2,004	2,998

Table 10. Indicators of education system (continued)

Indicators	1995-1996	1996-1997
Educational expenditure (in million tugriks)	42,087	56,598
Enrolment in higher education (percentage):		
- state	72	70.8
- private	28	29.2
Capital investments:		
- capital repairs, professional educational institutions	167	205
- equipment	97	135
Number of state universities, other higher-education institutions and colleges	29	33
Number of students	35,229	46,185
Number of teachers	2,799	3,261
Number of private universities, other higher-education institutions and colleges	57	71
Number of students	14,405	19,087
Number of teachers	617	925
Number of professional and 'special secondary' educational institutions	38	38
Number of students	12,320	11,650
Number of teachers	742	656
Number of general primary and secondary schools	645	630
Including:		
primary	89	96
non-complete secondary	219	214
complete secondary	337	320
Number of students	435,061	447,121
Number of teachers	18,511	18,118
Drop-outs	3.92	2.5
Number of kindergartens	660	658
Number of children	70,035	73,955
Number of teachers	2,985	3,015

Table 11. Estimates of expenditure for education for 1998-2000

	1998	1999	2000	2001	2002
Total	53,142,494.2	57,691,952.2	67,440,574.2	71,405,655.8	72,731,926.9
Pre-primary and primary education	37,339,616.7	39,310,767.9	47,810,948.1	50,685,717.2	51,964,540.3
Pre-primary education	10,454,101.7	9,646,793.1	11,114,944.5	11,192,946	11,192,946
Nursery schools (0-3 years)	481,629.3	533,658.5	605,893.1	606,114.1	606,114.1
Kindergartens (4-7 years)	9,972,472.4	9,113,134.6	10,509,051.4	10,586,831.9	10,586,831.9
Basic education (8-18 years)	26,885,515	29,663,974.8	36,696,003.6	39,492,771.2	40,771,594.3
Secondary education	3,162,416.6	3,411,102.2	3,920,961.8	4,013,997.6	4,013,997.6
Professional education	1,836,808.5	1,945,886.7	2,240,276.8	2,309,614.5	2,309,614.5
'Special secondary' education	1,325,608.1	1,465,215.5	1,680,685	1,704,383.1	1,704,383.1
Higher education	8,767,954.6	7,688,237.6	8,204,650.9	8,214,667.5	8,214,667.5
Other services of education system	3,872,506.3	7,281,844.5	7,504,013.4	8,492,373.5	8,538,721.5

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Table 12. Estimates of expenditure from central education budget for 1998-2002

	1998 actual	1999 estimated	1999 actual	2000 estimated
Total	13,975,556.7	17,435,412.5	17,175,554.1	20,637,131.1
Professional industrial educational centres				
Arhangai	46,901.7	59,031.8	57,155.5	61,952.3
Bayan-Ulgi	48,352.7	46,385.0	45,166.7	46,506.1
Bayanbongor	59,700.0	61,855.8	60,486.2	67,565.9
Bulgan	51,637.9	57,620.5	56,295.6	94,082.0
Gobi-Altai	66,952.5	77,589.8	75,298.9	136,114.9
Eastern *Gobi*	25,306.2	28,862.6	28,104.6	37,168.8
Eastern *aymak*	35,713.4	40,059.1	38,733.4	52,747.1
Middle *Gobi*	46,008.1	57,357.8	56,662.2	63,488.6
Zavhan	66,505.8	76,825.4	75,468.4	76,586.7
Uburhangai	132,984.7	89,290.4	86,343.8	178,038.4
Southern *Gobi*	28,321.5	31,222.2	39,474.6	34,108.7
Selengi	69,442.6	61,336.8	58,654.9	61,336.8
Shamar	61,649.6	70,468.5	68,019.3	70,426.4
Central *aymak*	36,555.0	40,564.5	39,091.1	42,090.3
Zamar aymak	68,399.6	57,723.0	54,982.1	57,522.0
Bayanchandman	77,604.9	72,621.3	68,383.7	85,462.0
Uvsanur	44,427.8	54,645.2	53,345.1	54,624.2
Hovdos	65,473.6	88,704.9	85,910.4	130,154.9
Hubsugul	43,027.6	45,647.8	46,163.0	55,289.5
Henti	51,106.5	45,066.5	44,521.8	45,302.2
Ulaanbaatar utilities	127,887.3	113,938.1	111,263.5	113,918.0
Ulaanbaatar food processing	124,559.3	125,330.0	122,569.5	116,520.1
Ulaanbaatar textile	65,101.1	87,079.7	85,002.8	110,581.2
City of *Nalayha*	38,363.3	54,301.0	52,827.4	54,439.9
Orhon	31,596.1	53,099.7	51,784.8	58,049.4
Arhangai teacher-training college	81,211.1	109,413.0	106,802.8	122,038.2
Bayan-Ulgi culture college	35,823.1	41,477.2	40,845.8	51,481.6
Gogi-Altai medical college	83,494.8	94,475.8	92,339.8	107,371.7
Eastern *Gobi* medical college	123,324.8	115,341.0	112,165.6	129,646.9
Eastern *aymak* teacher-training college	79,531.5	99,199.8	97,626.2	114,404.1

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Table 12. Estimates of expenditure from central education budget for 1998-2002 (continued)

	1998 actual	1999 estimated	1999 actual	2000 estimated
Eastern *aymak* agricultural college	103,837.6	109,415.5	108,706.4	99,959.0
Zavhan economics college	77,453.3	128,482.2	124,388.5	156,497.0
Zavhan musical college	38,341.5	40,964.6	39,807.2	78,996.3
Ullanbaatar musical college	167,398.4	173,715.4	170,962.2	176,491.6
Ulaanbaator medical college	180,232.6	123,057.2	121,505.5	151,026.1
Ulaanbaatar construction college	127,211.2	109,902.6	108,898.0	119,309.2
Construction industrial educational centre	97,362.7	85,543.7	84,808.1	114,025.3
Mongolian State university	1,796,945.3	1,669,722.7	1,643,017.0	1,963,572.0
State pedagogical university	1,057,575.7	1,200,326.7	1,160,381.6	1,250,894.9
Agricultural university	932,729.8	740,860.1	719,985.4	1,094,086.3
Medical university	834,598.6	726,512.8	709,678.4	741,570.2
Technical university	2,547,450.0	2,007,429.8	1,947,912.6	2,651,479.1
Humanities university	321,878.3	263,836.0	255,400.2	295,267.2
University of culture and arts	426,190.1	338,634.8	333,690.1	333,944.2
Moscow State university branch in *Hovd*	253,617.1	281,600.5	273,690.0	353,600.5
Institute of trade and industry	420,802.5	331,672.3	316,939.1	454,248.7
State foundation of education	0	2,616,915.0	2,616,915.0	3,594,663.0
Centralized activities	2,674,967.9	3,896,400.0	3,895,400.0	2,394,737.0
Childhood centre	0	180,000.0	180,000.0	177,699.7
Ulaanbaatar culture college	0	125,869.9	124,616.6	152,080.2
Department of State foundation of education	0	160,000	159,756.2	183,390.0
Design college	0	29,300.0	29,340.0	29,340.0
Selengi industrial educational centre 'Santa'	0	31,000.0	31,000.0	31,000.0

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Table 12. Estimates of expenditure from central education budget for 1998-2002 (continued)

	2000 actual	2001 estimated	2002 estimated
Total	18,513,842.7	19,576,066.1	19,576,066.1
Professional industrial educational centres			
Arhangai	65,823.1	62,509.2	62,509.2
Bayan-Ulgi	52,712.9	54,612.9	54,612.9
Bayanbongor	69,531.1	71,831.1	71,831.1
Bulgan	67,607.1	69,807.1	69,807.1
Gobi-Altai	86,271.8	88,271.8	88,271.8
Eastern *Gobi*	32,576.6	37,580.6	37,580.6
Eastern *aymak*	45,974.6	51,751.6	51,751.6
Middle *Gobi*	63,717.2	64,916.6	64,916.6
Zavhan	87,225.6	88,960.8	88,960.8
Uburhangai	102,283.4	114,949.4	114,949.4
Southern *Gobi*	34,583.9	36,582.4	36,582.4
Selengi	71,356.9	72,824.9	72,824.9
Shamar	81,502.1	82,802.1	82,802.1
Central *aymak*	46,691.2	48,241.2	48,241.2
Zamar aymak	69,170.6	70,570.6	70,570.6
Bayanchandman	98,105.6	99,745.1	99,745.1
Uvsanur	63,711.9	65,711.9	65,711.9
Hovdos	96,385.1	98,658.1	98,658.1
Hubsugul	54,603.2	56,335.2	56,335.2
Henti	51,924.0	52,643.3	52,643.3
Ulaanbaatar utilities	131,883.5	136,883.4	136,883.4
Ulaanbaatar food processing	143,510.7	148,509.1	148,509.1
Ulaanbaatar textile	99,889.5	103,889.5	103,889.5
City of *Nalayha*	61,256.6	63,351.6	63,351.6
Orhon	60,578.6	62,378.2	62,378.2
Arhangai teacher-training college	116,847.7	119,847.7	119,847.7
Bayan-Ulgi culture college	46,326.3	51,325.2	51,325.2
Gogi-Altai medical college	106,363.4	110,363.4	110,363.4
Eastern *Gobi* medical college	126,882.9	126,882.9	126,882.9
Eastern *aymak* teacher-training college	108,453.0	108,453.0	108,453.0

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Table 12. Estimates of expenditure from central education budget for 1998-2002 (continued)

	2000 actual	2001 estimated	2002 estimated
Eastern *aymak* agricultural college	120,874.3	120,874.3	120,874.3
Zavhan economics college	143,660.6	145,410.6	145,410.6
Zavhan musical college	46,424.3	49,424.3	49,424.3
Ulaanbaatar musical college	217,927.5	217,927.5	217,927.5
Ulaanbaator medical college	144,758.9	144,758.1	144,758.1
Ulaanbaatar construction college	132,419.8	139,369.8	139,369.8
Construction industrial educational centre	97,687.2	101,687.2	101,687.2
Mongolian State university	1,802,913.0	1,802,913.0	1,802,913.0
State pedagogical university	1,170,348.8	1,170,348.8	1,170,348.8
Agricultural university	835,539.8	835,539.8	835,539.8
Medical university	767,200.8	759,490.8	759,490.8
Technical university	2,132,074.7	2,132,074.7	2,132,074.7
Humanities university	295,795.2	295,795.2	295,795.2
University of culture and arts	371,655.3	371,655.3	371,655.3
Moscow State university branch in *Hovd*	360,738.0	360,738.0	360,738.0
Institute of trade and industry	337,648.1	337,648.1	337,648.1
State foundation of education	2,616,915.0	3,594,663.0	3,594,663.0
Centralized activities	3,994,737.0	3,994,737.0	3,994,737.0
Childhood centre	175,859.9	173,559.5	173,559.5
Ulaanbaatar culture college	146,632.5	146,632.5	146,632.5
Department of State foundation of education	185,223.6	185,223.6	185,223.6
Design college	29,300.0	29,300.0	29,300.0
Selengi industrial educational centre 'Santa'	33,836.9	33,706.7	33,706.7

Table 13. Enrolment in universities, other higher-education institutions and colleges in 1999-2003

	Total enrolment in 1999	2000 estimated		
		Total enrolment	Including Graduates	Including Admitted
Mongolian State university	7,824	5,337	1,496	870
State pedagogical university	5,543	5,091	1,239	895
Moscow State university branch in *Hovd*	941	1,000	176	210
Technical university	9,672	9,210	1,181	1,045
Humanities university	1,062	1,087	211	245
Technological college (*Darhan-Uul*)	746	899	99	325
Moscow State university branch in *Orhon*	341	332	61	30
Agricultural university	4,297	4,307	504	695
Medical university	1,889	1,804	325	325
University of culture and arts	696	729	230	195
Financial economics institute	1,304	975	249	140
Institute of trade and industry	1,987	2,228	459	265
Institute of cinema	248	255	19	45
Institute of arts	430	411	60	45
Technical university branch in *Suhebaatar*	0	50	0	50
Technical university branch in *Orhon*	0	100	0	75
Ulaanbaatar university	678	936	86	320
TOTAL	**38,869**	**36,231**	**6,659**	**5,690**

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Table 13. Enrolment in universities, other higher-education institutions and colleges in 1999-2003 (continued)

	Total enrolment in 1999	2000 estimated Total enrolment	Including Graduates	Including Admitted
Mongolian State university	7,824	4,711	2,294	870
State pedagogical university	5,543	4,747	1,615	895
Moscow State university branch in *Hovd*	941	1,034	275	210
Technical university	9,672	9,074	1,727	1,045
Humanities university	1,062	1,121	296	245
Technological college (*Darhan-Uul)*	746	1,125	181	325
Moscow State university branch in *Orhon*	341	301	74	30
Agricultural university	4,297	4,498	848	695
Medical university	1,889	1,804	313	325
University of culture and arts	696	694	202	195
Financial economics institute	1,304	866	378	140
Institute of trade and industry	1,987	2,034	491	265
Institute of cinema	248	281	91	45
Institute of arts	430	396	100	45
Technical university branch in *Suhebaatar*	0	100	0	50
Technical university branch in *Orhon*	0	100	0	50
Ulaanbaatar university	678	1,170	147	320
TOTAL	**38,869**	**35,532**	**9,312**	**5,960**

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Table 13. Enrolment in universities, other higher-education institutions and colleges in 1999-2003 (continued)

	Total enrolment in 1999	2002 estimated		
		Total enrolment	Including Graduates	Including Admitted
Mongolian State university	7,824	3,287	2,545	870
State pedagogical university	5,543	4,027	1,835	895
Moscow State university branch in *Hovd*	941	969	369	210
Technical university	9,672	8,392	2,310	1,045
Humanities university	1,062	1,070	412	245
Technological college (*Darhan-Uul)*	746	1,269	317	325
Moscow State university branch in *Orhon*	341	257	162	30
Agricultural university	4,297	4,345	1,171	695
Medical university	1,889	1,816	334	325
University of culture and arts	696	687	380	195
Financial economics institute	1,304	628	397	140
Institute of trade and industry	1,987	1,808	868	265
Institute of cinema	248	235	110	45
Institute of arts	430	341	103	45
Technical university branch in *Suhebaatar*	0	150	50	50
Technical university branch in *Orhon*	0	150	50	50
Ulaanbaatar university	678	1,343	323	320
TOTAL	**38,869**	**32,180**	**12,242**	**5,960**

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Table 13. Enrolment in universities, other higher-education institutions and colleges in 1999-2003 (continued)

	Total enrolment in 1999	2003 estimated		
		Total enrolment	Including Graduates	Admitted
Mongolian State university	7,824	1,612	1,580	870
State pedagogical university	5,543	3,087	1,155	895
Moscow State university branch in *Hovd*	941	810	395	210
Technical university	9,672	7,127	3,565	1,045
Humanities university	1,062	903	289	245
Technological college (*Darhan-Uul*)	746	1,277	300	325
Moscow State university branch in *Orhon*	341	125	60	30
Agricultural university	4,297	3,869	1,663	695
Medical university	1,889	1,807	398	325
University of culture and arts	696	502	411	195
Financial economics institute	1,304	371	140	140
Institute of trade and industry	1,987	1,205	560	265
Institute of cinema	248	170	35	45
Institute of arts	430	283	72	45
Technical university branch in *Suhebaatar*	0	150	50	50
Technical university branch in *Orhon*	0	150	50	50
Ulaanbaatar university	678	1,340	310	320
TOTAL	**38,869**	**25,898**	**11,538**	**5,960**

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Table 13. Enrolment in universities, other higher-education institutions and colleges in 1999-2003 (continued)

	Total enrolment in 1999	2000 estimated		
		Total enrolment	Including Graduates	Including Admitted
Arhangai teacher-training college	589	641	143	160
Eastern *Aymak* teacher-training college	327	407	62	115
Bayan-Ulgi teacher-training college	230	258	89	70
Uvurhangai technical university branch	378	1,110	215	420
Zavhan economics college	760	756	137	115
Eastern *Gobi* medical college	444	471	53	135
Ullanbaatar medical college	842	789	403	325
Agricultural university branch	710	975	188	140
Darhan technical college	603	647	156	140
Culture college	578	595	149	140
Darhan medical college branch	490	515	96	140
Gobi-Altai medical college branch	379	438	30	140
Railway college	470	418	199	120
College of design and arts	258	360	32	50
Ulaanbaatar construction college	1,147	1,263	366	520
Construction educational centre	302	466	166	300
Musical college	210	272	38	64
TOTAL	**8,717**	**10,381**	**4,522**	**3,094**

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Table 13. Enrolment in universities, other higher-education institutions and colleges in 1999-2003 (continued)

	Total enrolment in 1999	2001 estimated		
		Total enrolment	Including Graduates	Including Admitted
Arhangai teacher-training college	580	659	137	160
Eastern *Aymak* teacher-training college	327	460	90	115
Bayan-Ulgi teacher-training college	230	239	69	70
Uvurhangai technical university branch	378	1,315	140	420
Zavhan economics college	760	734	187	115
Eastern *Gobi* medical college	444	553	60	135
Ullanbaatar medical college	842	711	387	325
Agricultural university branch	710	927	136	140
Darhan technical college	603	631	319	140
Culture college	578	586	128	140
Darhan medical college branch	490	559	107	140
Gobi-Altai medical college branch	379	548	123	140
Railway college	470	339	138	120
College of design and arts	258	378	90	50
Ulaanbaatar construction college	1,147	1,417	405	520
Construction educational centre	302	600	170	300
Musical college	210	298	86	64
TOTAL	**8,717**	**10,295**	**2,772**	**3,094**

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Table 13. Enrolment in universities, other higher-education institutions and colleges in 1999-2003 (continued)

	Total enrolment in 1999	2002 estimated		
		Total enrolment	Including Graduates	Including Admitted
Arhangai teacher training college	589	681	191	160
Eastern *Aymak* teacher training college	327	485	135	115
Bayan-Ulgi teacher training college	230	240	36	70
Uvurhangai technical university branch	378	1,595	111	420
Zavhan economics college	760	662	324	115
Eastern *Gobi* medical college	444	628	60	135
Ullanbaatar medical college	842	649	391	325
Agricultural university branch	710	931	237	140
Darhan technical college	603	452	200	140
Culture college	578	598	198	140
Darhan medical college branch	490	592	215	140
Gobi-Altai medical college branch	379	565	120	140
Railway college	470	321	140	120
College of design and arts	258	338	109	50
Ulaanbaatar construction college	1,147	1,532	429	520
Construction educational centre	302	730	170	300
Musical college	210	276	41	64
TOTAL	**8,717**	**11,275**	**3,107**	**3,094**

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Table 13. Enrolment in universities, other higher-education institutions and colleges in 1999-2003 (continued)

	Total enrolment in 1999	2003 estimated		
		Total enrolment	Including	
			Graduates	Admitted
Arhangai teacher-training college	589	750	240	160
Eastern *Aymak* teacher-training college	327	465	120	115
Bayan-Ulgi teacher-training college	230	274	90	70
Uvurhangai technical university branch	378	1,904	220	420
Zavhan economics college	760	453	259	115
Eastern *Gobi* medical college	444	723	68	135
Ullanbaatar medical college	842	583	390	325
Agricultural university branch	710	834	380	140
Darhan technical college	603	392	200	140
Culture college	578	585	190	140
Darhan medical college branch	490	517	210	140
Gobi-Altai medical college branch	379	585	34	140
Railway college	470	301	140	120
College of design and arts	258	279	160	50
Ulaanbaatar construction college	1,147	1,623	400	520
Construction educational centre	302	860	170	300
Musical college	210	299	62	64
TOTAL	**8,717**	**11,427**	**3,333**	**3,094**

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Table 13. Enrolment in universities, other higher-education institutions and colleges in 1999-2003 (continued)

	Total enrolment in 1999	2000 estimated		
		Total enrolment	Including	
			Graduates	Admitted
Utilities college	816	948	287	550
Food-processing college	921	1,028	350	370
Textile college	643	776	203	390
Professional industrial-educational centre Eastern *aymak*	259	357	37	320
Agricultural college branch in Hovd	323	404	33	200
Transport college	140	166	89	100
Professional industrial-educational centres				
Ulaanbaatar construction	437	647	162	210
Arhangai	187	317	49	210
Bayan-Ulgi	226	270	120	140
Bayanhongor	247	487	46	325
Bulgan	331	494	154	340
Gov-Altai	418	789	120	400
Eastern *Gobi*	159	202	82	120
Dornod	301	442	168	270
Middle *Gobi*	145	267	77	190
Zavhan	348	444	77	200
Southern *Gobi*	250	309	109	200
Selengi	218	468	168	400
Shaamar	275	356	120	200
Central	132	305	55	250
Zamara	196	496	58	300
Arhustan	30	101	30	100
Bayanchandman	218	373	185	190
Uvsamur	490	366	147	220
Hubsugul	320	462	222	240
Henti	212	392	60	250
Darhan	368	443	123	320
Orhon	275	428	128	300
Santi	75	120	75	120
Nalayh technical lyceum	273	230	39	200
Construction lyceum	227	353	86	200
TOTAL	19,276	22,601	6,500	2,978
GRAND TOTAL	66,862	69,213	17,681	11,762

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Table 13. Enrolment in universities, other higher-education institutions and colleges in 1999-2003 (continued)

	Total enrolment in 1999	2001 estimated		
		Total enrolment	Including Graduates	Admitted
Utilities college	816	948	287	550
Food-processing college	921	1,028	350	370
Textile college	643	776	203	390
Professional industrial-educational centre Eastern *aymak*	259	357	37	320
Agricultural college branch in Hovd	323	404	33	200
Transport college	140	166	89	100
Professional industrial-educational centres				
Ulaanbaatar construction	437	647	162	210
Arhangai	187	317	49	210
Bayan-Ulgi	226	270	120	140
Bayanhongor	247	487	46	325
Bulgan	331	494	154	340
Gov-Altai	418	789	120	400
Eastern *Gobi*	159	202	82	120
Dornod	301	442	168	270
Middle *Gobi*	145	267	77	190
Zavhan	348	444	77	200
Southern *Gobi*	250	309	109	200
Selengi	218	468	168	400
Shaamar	275	356	120	200
Central	132	305	55	250
Zamara	196	496	58	300
Arhustan	30	101	30	100
Bayanchandman	218	373	185	190
Uvsanur	490	366	147	220
Hubsugul	320	462	222	240
Henti	212	392	60	250
Darhan	368	443	123	320
Orhon	275	428	128	300
Santi	75	120	75	120
Nalayh technical lyceum	273	230	39	200
Construction lyceum	227	353	86	200
TOTAL 19,276	22,601	6,500	2,978	
GRAND TOTAL 66,862	69,213	17,681	11,762	

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Table 13. Enrolment in universities, other higher-education institutions and colleges in 1999-2003 (continued)

	Total enrolment in 1999	2002 estimated		
		Total enrolment	Including Graduates	Including Admitted
Utilities college	816	948	287	550
Food-processing college	921	1,028	350	370
Textile college	643	776	203	390
Professional industrial-educational centre Eastern *aymak*	259	357	37	320
Agricultural college branch in Hovd	323	404	33	200
Transport college	140	166	89	100
Professional industrial-educational centres				
Ulaanbaatar construction	437	647	162	210
Arhangai	187	317	49	210
Bayan-Ulgi	226	270	120	140
Bayanhongor	247	487	46	325
Bulgan	331	494	154	340
Gov-Altai	418	789	120	400
Eastern *Gobi*	159	202	82	120
Dornod	301	442	168	270
Middle *Gobi*	145	267	77	190
Zavhan	348	444	77	200
Southern *Gobi*	250	309	109	200
Selengi	218	468	168	400
Shaamar	275	356	120	200
Central	132	305	55	250
Zamara	196	496	58	300
Arhustan	30	101	30	100
Bayanchandman	218	373	185	190
Uvsanur	490	366	147	220
Hubsugul	320	462	222	240
Henti	212	392	60	250
Darhan	368	443	123	320
Orhon	275	428	128	300
Santi	75	120	75	120
Nalayh technical lyceum	273	230	39	200
Construction lyceum	227	353	86	200
TOTAL	19,276	22,601	6,500	2,978
GRAND TOTAL	66,862	69,213	17,681	11,762

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Table 13. Enrolment in universities, other higher-education institutions and colleges in 1999-2003 (continued)

	Total enrolment in 1999	2003 estimated		
		Total enrolment	Including Graduates	Including Admitted
Utilities college	816	948	287	550
Food-processing college	921	1,028	350	370
Textile college	643	776	203	390
Professional industrial-educational centre Eastern *aymak*	259	357	37	320
Agricultural college branch in Hovd	323	404	33	200
Transport college	140	166	89	100
Professional industrial-educational centres				
Ulaanbaatar construction	437	647	162	210
Arhangai	187	317	49	210
Bayan-Ulgi	226	270	120	140
Bayanhongor	247	487	46	325
Bulgan	331	494	154	340
Gov-Altai	418	789	120	400
Eastern *Gobi*	159	202	82	120
Dornod	301	442	168	270
Middle *Gobi*	145	267	77	190
Zavhan	348	444	77	200
Southern *Gobi*	250	309	109	200
Selengi	218	468	168	400
Shaamar	275	356	120	200
Central	132	305	55	250
Zamara	196	496	58	300
Arhustan	30	101	30	100
Bayanchandman	218	373	185	190
Uvsanur	490	366	147	220
Hubsugul	320	462	222	240
Henti	212	392	60	250
Darhan	368	443	123	320
Orhon	275	428	128	300
Santi	75	120	75	120
***Nalayh* technical lyceum**	273	230	39	200
Construction lyceum	227	353	86	200
TOTAL	**19,276**	**22,601**	**6,500**	**2,978**
GRAND TOTAL	**66,862**	**69,213**	**17,681**	**11,762**

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Table 14. Number of students at Bachelor, Master and Doctor courses in foreign educational institutions in 1997-1999

		1997				
Countries	Enrolment	Tuition fees	Allowances	Transport	Transfer	Total
USA	18	199,911	114,727.5	23,890.88	200	338,729.38
UK	8	88,858.8	74,220.5	9,494.2	400	172,973.5
Russia	12	36,480.56	0	1,429.84	0	37,910.4
Germany	21	16,995.4	201,715.2	15,200.9	593.58	234,505.08
Canada	2	13,432	14,644	2,320	0	30,396
Japan	1	9,015.68	0	0	0	9,015.68
Cuba	1	0	0	2,000	0	2,000
France	4	40,200	21,200	3,400	0	64,800
Turkey	12	14,179	0	4,380	0	18,559
Australia						
India						
Ukraine						
Switzerland						
Netherlands						
China						
Poland						
Finland						
Korea						
Czech Republic						
Total	79	419,072.44	426,507.2	62,115.82	1,193.58	908,889.04

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Table 14. Number of students at Bachelor, Master and Doctor courses in foreign educational institutions in 1997-1999 (continued)

	1998				
Countries	Enrolment	Tuition fees	Allowances	Transport	Total
USA	62	637,168	455,870	1,434	1,094,472
UK	10	114,591.64	114,377.75	2,450	577,384.39
Russia	44	52,943	31,060	298.71	160,178.51
Germany	25	30,384.19	149,878.11	1,862.45	651,180.91
Canada	6	46,439	43,490	1,160	151,889
Japan	1	21,280	0	0	41,213.36
Cuba	0	0	0	0	4,001
France	2	6,983	16,554	0	153,143
Turkey	0	0	0	0	37,130
Australia	3	26,646	14,042	5,698.68	46,389.68
India	1	0	0	5,070	5,071
Ukraine	1	2,000	545	0	2,546
Switzerland	1	1,342	18,790	0	20,133
Netherlands	1	8,200	3,800		12,001
China					
Poland					
Finland					
Korea					
Czech Republic					
Total	**161**	**962,476.83**	**864,453.86**	**17,973.84**	**1,844,904.53**

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Table 14. Number of students at Bachelor, Master and Doctor courses in foreign educational institutions in 1997-1999 (continued)

	1999				
Countries	Enrolment	Tuition fees	Allowances	Transport	Total
USA	57	398,706	323,715	0	722,421
UK	4	32,830.21	27,291.8	0	60,122.01
Russia	14	44,000	30,731	0	74,731
Germany	5	36,109.5	28,969.86	0	65,079.36
Canada	1	6,440	6,600	0	13,040
Japan	2	7,731.09	11,700	0	19,431.09
Cuba	0				
France	1	3,975	26,002	0	29,977
Turkey					
Australia	3	25,734	24,406	0	50,140
India	1	0	0	2,976	2,976
Ukraine					0
Switzerland					0
Netherlands	1	0	5,000	2,976	5,000
China					
Poland					
Finland					
Korea					
Czech republic					
Total	92	571,075.8	496,495.66	2,976	1,070,547.46

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Table 15. Statistical data on pre-primary institutions in 1999-2000

Aimak	Total number of kindergartens	Actual			Discontinued
		Public kindergartens	Kindergartens of the Ministry of Education	Private kindergartens	
Arhangai	26	24	0	2	0
Bayan-Olgi	20	20	0	0	0
Bayanhorgor	26	26	0	0	0
Bulgan	25	25	0	0	2
Gobi-Altai	25	24	1	0	0
Eastern *Gobi*	19	18	0	1	0
Dornod	24	24	0	0	0
Middle *Gobi*	20	20	0	0	0
Zavhan	34	34	0	0	2
Ovorhangai	27	27	0	0	0
Southern *Gobi*	17	16	1	0	2
Suhebaatar	17	17	0	0	1
Selengi	31	31	0	0	1
Central	36	36	0	0	0
Uvsanur	25	25	0	0	0
Hovd	24	24	0	0	0
Hubsugul	30	30	0	0	0
Henti	27	25	2	0	1
Darhan-Uul	16	14	1	1	1
Ulaanbaatar	150	147	2	1	1
Orhon	20	11	9	0	0
Gobisumber	6	5	1	0	0
Other	5	5	0	0	0
Total	**650**	**928**	**17**	**5**	**11**

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Table 15. Statistical data on pre-primary institutions in 1999-2000 (continued)

Aymak	Number of kinder-gartens	Number of groups	Number of orphan groups	Number of nursery schools	Average group size
Arhangai	26	57	5	0	29.4
Bayan-Olgi	20	50	4	6	23
Bayanhorgor	26	66	2	0	29
Bulgan	25	70	4	3	25.6
Gobi-Altai	25	65	0	1	38.2
Eastern *Gobi*	19	38	1	0	28.3
Dornod	24	85	6	5	29.5
Middle *Gobi*	20	63	0	2	29
Zavhan	34	80	0	0	30.7
Ovorhangai	27	74	4	2	27.6
Southern *Gobi*	17	50	2	0	29.2
Suhebaatar	17	45	1	2	27.7
Selengi	31	131	4	10	27.2
Central	36	82	5	0	28.6
Uvsanur	25	70	2	0	29.9
Hovd	24	71	2	5	36.2
Hubsugul	30	90	10	7	27.4
Henti	27	73	3	2	41.7
Darhan-Uul	16	154	6	15	34.1
Ulaanbaatar	150	1,050	40	104	29
Orhon	20	123	0	11	30
Gobisumber	6	21	1	0	26.6
Other	5	37	0	2	27
Total	**650**	**2,645**	**102**	**177**	**29.7**

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Table 15. Statistical data on pre-primary institutions in 1999-2000 (continued)

Aimak	Number of kinder-gartens	Number of children		Orphans	
		Total	Girls	Total	Girls
Arhangai	26	1,677	877	116	65
Bayan-Olgi	20	1,149	517	66	31
Bayanhorgor	26	1,913	1,026	25	15
Bulgan	25	1,789	943	291	205
Gobi-Altai	25	2,486	1,258	205	106
Eastern *Gobi*	19	1,074	603	25	14
Dornod	24	2,511	1,291	167	79
Middle *Gobi*	20	1,825	884	6	4
Zavhan	34	2,459	384	95	42
Ovorhangai	27	2,042	998	185	85
Southern *Gobi*	17	1,460	760	103	65
Suhebaatar	17	1,247	639	31	19
Selengi	31	3,567	1,877	116	58
Central	36	2,345	1,239	170	78
Uvsanur	25	2,093	1,099	30	19
Hovd	24	2,570	95	0	0
Hubsugul	30	2,465	1,175	139	93
Henti	27	3,043	1,619	103	54
Darhan-Uul	16	5,245	2,978	281	190
Ulaanbaatar	150	30,427	15,460	1,430	790
Orhon	20	3,685	1,825	14	6
Gobisumber	6	558	312	45	31
Other	5	1,000	472	0	0
Total	**650**	**78,630**	**39,192**	**3,643**	**2,049**

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Table 16. Statistical data on general primary and secondary schools in 1999-2000

Aimak	Number of schools	Total enrolment		1 grade	
		Total	Girls	Total	Girls
Arhangai	31	18,451	9,833	2,980	1,467
Bayan-Olgi	35	17,196	8,802	2,843	1,373
Bayanhorgor	25	16,338	8,560	2,640	1,298
Bulgan	25	12,165	6,447	1,809	919
Gobi-Altai	27	12,265	6,394	1,765	872
Eastern *Gobi*	19	10,027	5,378	1,459	771
Dornod	25	16,182	8,449	2,197	1,039
Middle *Gobi*	20	9,280	5,052	1,420	723
Zavhan	34	16,383	8,608	2,439	1,173
Ovorhangai	32	19,212	10,450	3,017	1,500
Southern *Gobi*	20	6,362	5,003	1,385	683
Suhebaatar	16	10,580	5,560	1,675	814
Selengi	31	22,626	11,724	3,151	1,535
Central	33	19,276	10,101	2,705	1,343
Uvsanur	28	16,686	8,835	2,964	1,461
Hovd	21	17,637	9,171	2,731	1,354
Hubsugul	31	21,638	11,697	3,394	1,692
Henti	30	14,321	7,574	2,112	1,030
Darhan-Uul	20	19,532	10,045	2,695	1,330
Ulaanbaatar	90	144,364	74,484	18,436	9,133
Orhon	15	17,929	9,450	2,387	1,158
Gobisumber	5	2,986	1,602	405	204
Other	5	2,829	1,557	292	175
Total	**618**	**467,265**	**244,758**	**66,881**	**33,047**
Ulaanbaatar private schools	50	2,773	1,417	883	470
TOTAL	**668**	**470,034**	**246,173**	**67,764**	**33,517**

Table 16. Statistical data on general primary and secondary schools in 1999-2000 (continued)

Aimak	Number of schools	II grade		III grade	
		Total	Girls	Total	Girls
Arhangai	31	2,971	1,460	2,583	1,381
Bayan-Olgi	35	2,756	1,329	2,236	1,143
Bayanhorgor	25	2,502	1,234	2,375	1,190
Bulgan	25	1,725	876	1,591	798
Gobi-Altai	27	1,730	812	1,678	821
Eastern *Gobi*	19	1,428	723	1,297	643
Dornod	25	2,349	1,145	2,117	1,077
Middle *Gobi*	20	1,343	676	1,320	639
Zavhan	34	2,227	1,114	2,091	1,060
Ovorhangai	32	3,116	1,589	2,890	1,486
Southern *Gobi*	20	1,296	616	1,301	657
Suhebaatar	16	1,584	769	1,384	720
Selengi	31	3,000	1,473	2,887	1,473
Central	33	2,668	1,313	2,589	1,336
Uvsanur	28	2,740	1,385	2,373	1,196
Hovd	21	2,571	1,287	2,300	1,158
Hubsugul	31	3,452	1,756	3,024	1,564
Henti	30	1,948	977	1,891	944
Darhan-Uul	20	2,610	1,243	2,390	1,208
Ulaanbaatar	90	18,347	9,171	18,353	9,172
Orhon	15	2,243	1,148	2,231	1,121
Gobisumber	5	402	189	379	197
Other	5	206	106	256	155
Total	**618**	**65,214**	**32,355**	**61,536**	**31,139**
Ulaanbaatar private schools	50	783	392	411	221
TOTAL	**668**	**65,997**	**32,747**	**61,947**	**31,360**

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Table 16. Statistical data on general primary and secondary schools in 1999-2000 (continued)

Aimak	Number of schools	IV grade		V grade	
		Total	Girls	Total	Girls
Arhangai	31	2,323	1,201	1,967	1,061
Bayan-Olgi	35	2,144	1,089	1,932	1,012
Bayanhorgor	25	2,121	1,099	1,917	970
Bulgan	25	1,593	831	1,396	710
Gobi-Altai	27	1,647	846	1,441	761
Eastern *Gobi*	19	1,122	613	1,114	605
Dornod	25	1,950	987	1,871	969
Middle *Gobi*	20	1,197	645	1,122	646
Zavhan	34	2,000	1,028	1,824	950
Ovorhangai	32	2,382	1,256	2,080	1,150
Southern *Gobi*	20	1,167	588	1,024	560
Suhebaatar	16	1,376	756	1,205	658
Selengi	31	2,739	1,374	2,601	1,322
Central	33	2,475	1,293	2,256	1,154
Uvsanur	28	2,221	1,158	1,809	970
Hovd	21	2,149	1,032	2,022	1,070
Hubsugul	31	2,694	1,440	2,398	1,312
Henti	30	1,712	919	1,592	849
Darhan-Uul	20	2,292	1,081	2,198	1,138
Ulaanbaatar	90	17,597	8,854	16,857	8,472
Orhon	15	1,991	1,067	2,080	1,044
Gobisumber	5	367	184	311	178
Other	5	212	135	360	199
Total	**618**	**57,471**	**29,476**	**53,377**	**27,760**
Ulaanbaatar private schools	50	262	118	147	79
TOTAL	**668**	**57,733**	**29,594**	**53,524**	**27,839**

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Table 16. Statistical data on general primary and secondary schools in 1999-2000 (continued)

Aymak	Number of schools	VI grade		VII grade	
		Total	Girls	Total	Girls
Arhangai	31	1,885	1,022	1,242	728
Bayan-Ölgii	35	1,589	852	1,318	676
Bayanhorgor	25	1,729	965	1,200	671
Bulgan	25	1,415	745	987	574
Gobi-Altai	27	1,408	752	1,079	588
Eastern *Gobi*	19	1,134	581	881	492
Dornod	25	1,832	958	1,536	881
Middle *Gobi*	20	975	557	830	473
Zavhan	34	1,795	972	1,397	763
Ovorhangai	32	1,940	1,112	1,425	844
Southern *Gobi*	20	990	569	830	502
Suhebaatar	16	1,120	593	896	474
Selengi	31	2,482	1,275	1,996	1,054
Central	33	2,095	1,110	1,711	916
Uvsanur	28	1,692	958	1,218	726
Hovd	21	1,740	921	1,357	755
Hubsugul	31	2,149	1,232	1,660	952
Henti	30	1,510	789	1,207	698
Darhan-Uul	20	2,239	1,179	1,827	1,008
Ulaanbaatar	90	16,067	8,332	13,280	7,013
Orhon	15	1,935	1,054	1,648	919
Gobisumber	5	323	174	229	133
Other	5	222	108	441	256
Total	**618**	**50,266**	**26,810**	**40,195**	**22,096**
Ulaanbaatar private schools	50	142	63	52	23
TOTAL	**668**	**50,408**	**26,873**	**40,247**	**22,119**

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Table 16. Statistical data on general primary and secondary schools in 1999-2000 (continued)

Aimak	Number of schools	VIII grade		IX grade		X grade	
		Total	Girls	Total	Girls	Total	Girls
Arhangai	31	1,096	611	710	458	694	444
Bayan-Olgi	35	1,021	548	741	396	616	384
Bayanhorgor	25	1,006	589	478	297	370	247
Bulgan	25	825	485	494	303	330	206
Gobi-Altai	27	846	483	434	295	257	164
Eastern *Gobi*	19	833	495	486	291	273	164
Dornod	25	1,265	722	736	469	329	202
Middle *Gobi*	20	662	426	333	214	78	53
Zavhan	34	1,219	699	681	419	710	430
Ovorhangai	32	1,194	719	565	388	603	406
Southern *Gobi*	20	681	382	355	232	333	214
Suhebaatar	16	746	410	374	236	220	130
Selengi	31	1,765	976	1,223	756	782	522
Central	33	1,521	844	812	502	444	290
Uvsanur	28	1,107	636	562	345	0	0
Hovd	21	1,142	636	794	469	831	489
Hubsugul	31	1,258	745	819	500	790	504
Henti	30	1,054	601	728	421	567	346
Darhan-Uul	20	1,576	857	1,081	628	624	373
Ulaanbaatar	90	12,227	6,662	8,897	5,125	4,303	2,530
Orhon	15	1,397	781	1,170	672	847	486
Gobisumber	5	237	136	189	112	144	95
Other	5	421	206	261	128	158	89
Total	**618**	**35,099**	**19,649**	**22,923**	**13,656**	**14,303**	**8,768**
Ulaanbaatar private schools	50	29	17	52	27	12	7
TOTAL	**668**	**35,128**	**19,666**	**22,975**	**13,683**	**14,315**	**8,775**

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Table 17. Number of drop-outs

Year	Number of general primary and secondary schools	Number of students	Number of drop-outs
1980	571	372,112	
1981	576	378,888	5,040
1982	574	387,386	9,011
1983	579	397,383	6,451
1984	583	405,742	7,390
1985	588	415,768	174
1986	591	424	3,872
1987	604	430,540	2,002
1988	607	438,152	1,453
1989	615	446,665	20,341
1990	634	440,986	35,579
1991	643	411,696	33,530
1992	679	384,069	33,886
1993	663	370,302	23,073
1994	659	381,204	16,346
1995	664	403,847	14,272
1996	658	418,293	16,095
1997	645	435,061	14,804
1998	630	447,121	15,053
1999	668	470,038	

Table 18. Number of boarding schools attached to general primary and secondary schools

Year	Number of general schools	Number of students at general s schools	Number of boarding schools	Number of students at boarding schools
1971	521	245,005	394	38,619
1972	532	261,152	389	41,563
1973	547	274,511	406	43,808
1974	555	289,295	412	47,854
1975	555	301,936	406	50,445
1976	560	320,336	409	53,979
1977	570	335,931	412	55,956
1978	570	349,808	411	58,898
1979	570	363,541	412	65,447
1980	571	372,112	411	68,393
1981	576	378,888	411	68,416
1982	574	387,386	412	70,552
1983	579	397,383	408	71,122
1984	583	405,742	407	71,951
1985	588	415,768	412	74,967
1986	591	424,545	410	75,466
1987	604	430,540	413	74,320
1988	607	438,152	411	73,331
1989	615	446,665	403	73,299
1990	634	440,986	403	64,362
1991	643	411,696	399	52,158
1992	679	384,069	384	35,368
1993	663	370,302	370	24,182
1994	659	381,204	366	21,364
1995	664	403,847	341	18,867
1996	658	418,293	331	17,649
1997	645	435,061	322	18,369
1998	630	447,121	340	18,832
1999	668	470,038	348	19,567

Table 19. Number of kindergartens, schools, students and teachers

Educational institutions	Number of schools of all levels		
	Total	Public	Private
Kindergartens	658	634	24
Schools	630	610	20
10 years of schooling	320	318	2
8 years of schooling	214	213	1
Primary schools	96	78	18
Vocational schools	110	110	-
Special secondary institutions	142	67	75
Universities and colleges	104	33	71
Special institutions for handicapped	38	34	4

Table 19. Number of kindergartens, schools, students and teachers (continued)

Educational institutions	Number of students		
	Total	Public schools	Private schools
Kindergartens	73,955	n.a.	n.a.
Schools	447,121	445,851	1,270
10 years of schooling	210,100	208,903	1,197
8 years of schooling	87,630	87,476	154
Primary schools	126,273	126,178	95
Vocational schools	5,287	5,287	-
Special secondary institutions	76,922	57,646	19,276
Universities and colleges	65,272	46,151	19,121
Special institutions for handicapped	11,650	11,495	155

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Table 19. Number of kindergartens, schools, students and teachers (continued)

Educational institutions	Number of students		
	Total	Public schools	Private schools
Kindergartens	n.a.	3,015	n.a.
Schools	18,118	18,017	101
10 years of schooling	10,368	10,339	29
8 years of schooling	n.a.	n.a.	n.a.
Primary schools	7,750	7,678	72
Vocational schools	n.a.	n.a.	n.a.
Special secondary institutions	4,829	3,904	925
Universities and colleges	4,173	3,261	912
Special institutions for handicapped	656	643	13

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Table 20. Content of pre-primary, general primary and secondary education

Levels of education					Pre-primary			
Grade					Initial	Middle	Upper	Preparatory
Number of subjects					7	7	7	7
Structure of contents	Core content (state standard)	Humanities	Mongolian language and literature	A				
			Physical training	B	Physical training			
			Foreign language	C				
			Aesthetics	D	Music and singing			
					Fine arts			
		Mathematics	Algebra	E	Arithmetic			
			Geometry					
			Informatics					
		Natural history	Biology	F	Environmental sciences			
			Geography	G				
			Physics	H				
			Chemistry	I				
			Social sciences	J				
			Technology	K	Design			
	Regulation of standard	Compulsory content			Health			
		Content at school discretion			1. A -K all subjects 2. Natural subjects 3. Technical subjects 4. Second foreign language			

Table 20. Content of pre-primary, general primary and secondary education (continued)

Levels of education					Primary			
Grade					I	II	III	IV
Number of subjects					8	8	9	10
Structure of contents	Core content (state standard)	Humanities	Mongolian language and literature	A	Mongolian language			
					Mongolian written language			
			Physical training	B	Physical training			
			Foreign language	C				
			Aesthetics	D	Music and singing			
					Fine arts			
		Mathematics	Algebra	E	Mathematics			
			Geometry					
			Informatics					
		Natural history	Biology	F	Natural sciences			Natural history
			Geography	G				
			Physics	H				
			Chemistry	I				History of Mongolia
			Social sciences	J				
			Technology	K	Design			
	Regulation of standard	Compulsory content			Health-2			
					Economics-1			
		Content at school discretion			1. A -K all subjects 2. Natural subjects 3. Technical subjects 4. Second foreign language			

Table 20. Content of pre-primary, general primary and secondary education (continued)

Levels of education					General			
					Non-complete			
Grade					V	VI	VII	VIII
Number of subjects					11	13	13	13
Structure of contents	Core content (state standard)	Humanities	Mongolian language and literature	A	Mongolian language			
					Literature			
					Mongolian written language			
			Physical training	B	Physical training			
			Foreign language	C	Foreign languages (English, Russian)			
			Aesthetics	D	Music and singing			
					Fine arts			Algebra
		Mathematics	Algebra	E	Mathematics			Geometry
			Geometry					
			Informatics					
		Natural history	Biology	F	Biology			
			Geography	G	Natural sciences			Geography
			Physics	H				Physics
			Chemistry	I				Chemistry
			Social sciences	J	History of Mongolia			History of civilization
			Technology	K	Design			
	Regulation of standard	Compulsory content			Health-3			
					Economics-2			
					Law-1			
		Content at school discretion			1. A -K all subjects 2. Natural subjects 3. Technical subjects 4. Second foreign language			

Table 20. Content of pre-primary, general primary and secondary education (continued)

Levels of education					General	
					Complete	
Grade					IX	X
Number of subjects					13	13
Structure of contents	Core content (state standard)	Humanities	Mongolian language and literature	A	Mongolian language	
					Literature	
			Physical training	B	Physical training	
			Foreign language	C	Foreign languages (English, Russian)	
			Aesthetics	D		
					Algebra,Analysis	
		Mathematics	Algebra	E	Geometry	
			Geometry		Informatics	
			Informatics			
		Natural history	Biology	F	Biology	
			Geography	G	Geography	
			Physics	H	Physics	
			Chemistry	I	Chemistry	
			Social sciences	J	Civic sciences	
			Technology	K	Design	
	Regulation of standard	Compulsory content			Health-4	
					Economics-3	
					Law R 10-2	
		Content at school discretion			1.A -K all subjects 2. Natural subjects 3.Technical subjects 4. Second foreign language	

Chart 1. Enrolment in 2000 (sectoral shares in %)

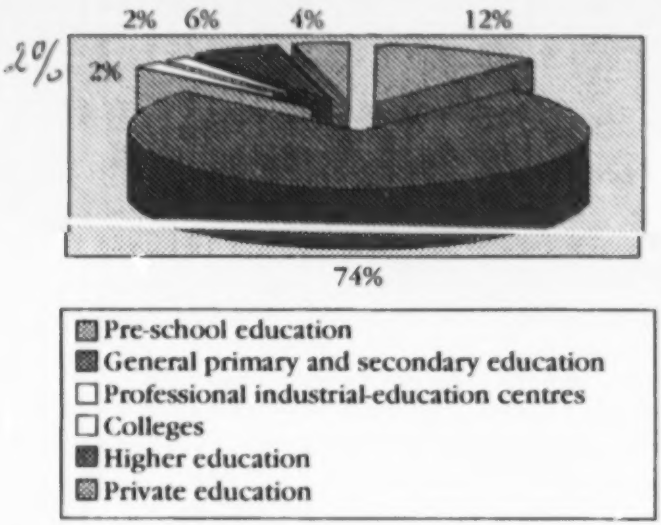
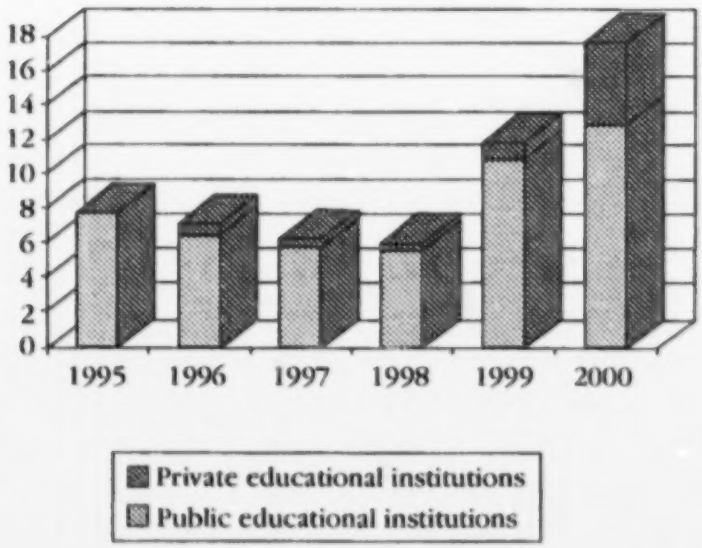


Chart 2. Number of students received educational loans from State Educational Foundation (000)



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The book

This publication was prepared within the IIEP project on capacity building in budgetary procedures for education in Central Asia and Mongolia. It provides an in-depth description and analysis of financial management and budgetary procedures for education in Mongolia, one of the former centrally-planned economies.

The case of Mongolia is intriguing. Being one of the low-income countries, it had to embark on sweeping market reforms to accelerate the transitional period. Elimination of state subsidies, introduction of cost-sharing (tuition fees), cost-recovery (student loans in higher education), financial diversification (income-generation at institutional level), radical privatization, including experiments with educational vouchers, have all contributed to making the Mongolian experience an exceptional one. Its co-operation with the Asian Development Bank also made it a 'testing ground' for reforms later introduced in Central Asian countries of the former Soviet Union.

Educational financing and budgeting in Mongolia

The authors

This study on educational finance and budgeting in Mongolia was prepared by ***Buluut Nanzaddorj****, Senior Economist, Budget Expenditure Division, Budget Policy Department, Mongolia Ministry of Finance. At earlier stages Sambuu Altangerel, then Chief, Education Department, Ministry of Science, Technology, Education and Culture, Mongolia also contributed to the study. Their competence, experience and professional qualities were essential for the success of the study as for that of the IIEP project as a whole.*

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